

I 29.88:W67

PUBLIC DOCUMENTS
DETROIT
FEM

BRICK WALKS

DEC 15 1988

CLEMSON
LIBRARY

HISTORIC STRUCTURES REPORT


WILLIAM HOWARD TAFT

National Historic Site



BY MARK A. CHAVEZ





Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

<http://archive.org/details/historicstructur00chav>

BRICK WALKS
HISTORIC STRUCTURES REPORT

WILLIAM HOWARD TAFT
National Historic Site

BY MARK A. CHAVEZ
Regional Historical Architect

NATIONAL PARK SERVICE

JULY 1988

BRICK WALLS
HISTORIC STRUCTURES REPORT

WILLIAM HOWARD TAYLOR
National Historic Site

BY MARK A. LAMBERT
National Historic Site

NATIONAL PARK SERVICE
1982

HISTORIC STRUCTURES REPORT

BRICK WALKS

WILLIAM HOWARD TAFT NATIONAL HISTORIC SITE

CINCINNATI, OHIO


by

Mark A. Chavez, Regional Historical Architect

National Park Service
Midwest Regional Office
Planning and Resource Preservation

Omaha

Recommended:



Superintendent, William Howard Taft Nat. Hist. Site

7-22-88
Date

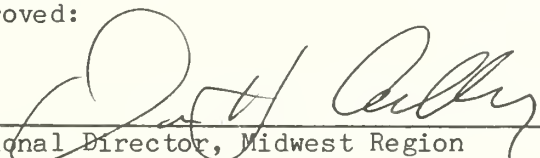
Recommended:



Associate Regional Director, Planning and Res. Pres.

9/1/88
Date

Approved:



Regional Director, Midwest Region

9/2/88
Date

THE HISTORY OF THE UNITED STATES

OF AMERICA

FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME

BY

W. H. CHAPMAN

OF THE UNIVERSITY OF CHICAGO

NEW YORK
HARVARD UNIVERSITY PRESS
1911

1911

CONTENTS

	List of Illustrations	ix
I.	Introduction	1
II.	History and Significance	5
III.	Historical Analysis	11
	Summary of References	40
IV.	Existing Conditions	79
V.	Recommendations and Design Development	107
	Design Development Drawings	127
VI.	Bibliography	131

LIST OF ILLUSTRATIONS

=====

<u>Fig.</u>	<u>Title</u>
3.1	Southwest corner of Taft home (McCollough, 1972, Plate VIII).
3.2	Detail of brick walk and limestone steps at southeast corner of Taft home.
3.3	Non-historic brick walk and stone steps seen in Figure 3.2.
3.4	South elevation of Taft home, circa 1940.
3.5	Detail of east elevation of Taft home, 1974.
3.6	Partial site plan showing "trapeziform" sandstone blocks, William Miller, 1974.
3.7	Detail of non-historic brick paving found under a concrete walk along the south side of the house.
3.8	Detail of Figure 3.7.
3.9	Historic photograph of Taft home, circa 1868.
3.10	Site Plan of Archeological Features (McCollough 1972).
3.11	Detail of brick paving uncovered when the south porch was removed during the 1974 restoration.
3.12	Detail of brick paving edge discovered beneath the concrete walk at the southeast corner of the home.
3.13	Edge of historic brick paving uncovered during the (1972) McCollough investigations.
3.14	Profile of "Transect A," from Figure 7 of McCollough's 1972 Archeological Investigation of Grounds.
3.15	Detail of McCollough's historic grounds plan (1972) delineating approximate quantities of brick paving.
3.16	Graphic analysis of estimated brick quantities from historical accounts.
3.17	Historic Plan of Grounds (McCollough, 1971).
3.18	Historic photograph of Burkhart home, circa 1868.
3.19	Northwest facade of Taft home (March 1987).

- 3.20 Northwest facade of Taft museum (former home of Charles P. Taft), June 1987.
- 3.21 Detail of brick paving at the southwest corner which was uncovered when concrete walks in this area were removed during the 1974 restoration.
- 3.22 Detail of historic brick paving along the east wall of the house.
- 3.23 Site Plan: Perry 1982 Archeological Investigations (from 4/27/82 - 5/5/82 field notes).
- 3.24 Site plan of Taft home detailing archeological features (Perry, 1982).
- 3.25 Plan view of excavation unit XU4 (Perry, 1982).
- 3.26 Brickwork in archeological excavation unit XU6 (Perry, 1982).
- 3.27 Plan view of excavtion units XU10 and XU11 (Perry, 1982).
- 3.28 Profile of excavation unit XU10 (Perry, 1982).
- 3.29 Table 1 (List of Defined Features, Taft house site--Perry, 1982).
- 4.1 Plan of Grounds in 1971 (McCollough, 1971).
- 4.2 Existing Conditions Site Plan (1987).
- 4.3 Grounds of Taft home, June 1987 (looking east from entry gate).
- 4.4 Grounds of Taft home, June 1987 (looking west from front entry steps).
- 4.5 Grounds of Taft home, June 1987 (looking south from front entry).
- 4.6 Grounds of Taft home, June 1987 (looking north along former concrete walk).
- 4.7 Grounds of Taft home, June 1987 (looking east at southwest corner of home).
- 4.8 Grounds of Taft home, June 1987 (looking north toward reconstructed piazza).
- 4.9 Grounds of Taft home, June 1987 (looking west along south exterior wall).
- 4.10 Grounds of Taft home, June 1987 (looking toward back yard).

- 4.11 Grounds of Taft home, June 1987 (looking west from back yard).
- 4.12 Grounds of Taft home, June 1987 (looking south from approximate location of historic well).
- 4.13 Grounds of Taft home, June 1987 (detail of reconstructed "areaway" paving at southeast corner of house).
- 4.14 Grounds of Taft home, June 1987 (looking east through brick areaway).
- 4.15 Grounds of Taft home, June 1987 (looking south from northeast corner of house).
- 4.16 Grounds of Taft home, June 1987 (looking south at termination of contemporary concrete walk near carriage entrance).
- 4.17 Grounds of Taft home, June 1987 (looking northeast toward carriage entrance).
- 4.18 Grounds of Taft home, June 1987 (looking west toward concrete steps leading to main entrance).
- 4.19 Grounds of Taft home, June 1987 (looking east along existing concrete walk leading to carriage entrance).
- 4.20 Grounds of Taft home, June 1987 (looking northeast toward existing wood alnding near northwest corner of home).
- 4.21 Grounds of Taft home, June 1987 (looking south from concrete steps toward main entrance).
- 4.22 Grounds of Taft home, June 1987 (looking north toward concrete steps from concrete walk to main--west--entrance).
- 4.23 Grounds of Taft home, June 1987 (looking south along concrete walk to main entrance).
- 4.24 Grounds of Taft home, June 1987 (looking north along concrete walk in front yard).
- 5.1 Detail of McCollough's Historic Grounds Plan (1971) showing numbered walks.
- 5.2 Summary of Archeological Findings.
- 5.3 Typical grounds plan (from Scott's "The Art of Beautifying Suburban Home Grounds," 1970, Plate XII).
- 5.4 Typical grounds plan (from Scott's "The Art of Beautifying Suburban Home Grounds," 1970, Plate XVI).

- 5.5 Typical grounds plan (from Scott's "The Art of Beautifying Suburban Home Grounds," 1970, Plate XVII).
- 5.6 Typical grounds plan (from Scott's "The Art of Beautifying Suburban Home Grounds," 1970, Plate XXII).
- 5.7 Typical grounds plan (from Scott's "The Art of Beautifying Suburban Home Grounds," 1970, Plate XXIV).
- 5.8 Design Development Drawings (Cover Sheet).
- 5.9 Design Development Drawings (Sheet 1: Site Plan, Existing Conditions / Demolition).
- 5.10 Design Development Drawings (Sheet 2: Site Plan, New Work).
- 5.11 Design Development Drawings (Sheet 3: Details).

I. INTRODUCTION

I. INTRODUCTION

=====

As background information for a design contract to replace existing concrete sidewalks with brick walks which existed historically at the William Howard Taft National Historic Site, this report summarizes issues and reaches a consensus about the existence or non-existence of the historic brick walks. Although only portions of the walks are intended to be reconstructed in fiscal year 1988 (at the north, west, and south sides), the balance of this report will provide the basis for further reconstructions. This report paraphrases various historical documents, adds personal synopses of these reports, and presents commentaries and conclusions based on first-hand observations. Note: For the purposes of this report, the term "historic," when referring to brick walks, denotes the period of the Taft family occupation.

I wish to thank the staff at William Howard Taft National Historic Site (especially Superintendent Steve Kesselman) for assistance in assembling the historical data and providing the historical photographs.

1. The first part of the document discusses the importance of maintaining accurate records of all activities. It emphasizes that this is essential for ensuring the integrity and reliability of the information collected.

2. The second part of the document outlines the procedures for collecting and analyzing data. It describes the various methods used to gather information and the steps involved in processing and interpreting the results.

3. The third part of the document provides a detailed account of the findings of the study. It includes a comprehensive overview of the data collected and a thorough analysis of the results.

4. The fourth part of the document discusses the implications of the findings and the steps that should be taken to address any issues identified. It also provides recommendations for future research and for the implementation of the findings.

5. The fifth part of the document provides a summary of the key points discussed in the document. It also includes a list of references and a list of appendices.

II. HISTORY AND SIGNIFICANCE

II. HISTORY AND SIGNIFICANCE

II. HISTORY AND SIGNIFICANCE

=====

The following summary is taken from the 1976 National Register of Historic Places nomination form prepared by David Arbogast for the William Howard Taft National Historic Site.

History

William Howard Taft National Historic Site is located at 2038 Auburn Avenue in the former suburb of Mt. Auburn in Cincinnati, Ohio. The Taft property historically included the main house, a garden and orchard, and several dependencies such as a barn and a stable. The original house was a two-story brick structure approximately 39 feet by 21 feet with a full basement. It faced west toward Auburn Avenue. Judging from structural and stylistic trends, the building appears to have been constructed in the early 1840s. In 1851, Alfonso Taft, the father of William Howard Taft, purchased the property and added a 40-by-22-foot wing on the east. This addition also contains two stories and a full basement.

During the period 1851 to 1877, before a fire destroyed a portion of the second floor on April 4, 1877, the house was basically Italianate in style. After the fire of 1877, the ceiling of the upper floor was raised and pressed metal details were added to the exterior. Although there was no change in actual square footage, the renovation was much more extensive than was required for necessary repairs. A second major alteration took place in 1964, when an attempt was made to restore the exterior of the house to its pre-1877 appearance. The existing condition of the building reflects this restoration.

The setting of the Taft Home has been altered considerably since the period of greatest historical significance. In land transfers since the historic period, the property size has been reduced from the original 1.82 acres to the present 0.5 acre. Frontage on Auburn Avenue has remained the same (100.00 feet), but the east-west depth of the lot has been cut to 220.00 feet. The house has been isolated by the destruction of neighboring houses on either side. The Mt. Auburn area as a whole, however, retains its essential character as a 19th century neighborhood, and is witnessing a revitalization largely shown by the rehabilitation of many fine old homes. The Mt. Auburn Historic District, surrounding the Taft property, is listed on the National Register of Historic Places.

With the exception of the gate steps at the front entrance, the concrete walkways and stairs on the grounds are not historic. These modern features, are, for the most part, in the same location as the historic stairs and walks. The only significant departure from the historic pattern is the addition of a walk around the northeast side of the house. During the historic period, it is likely that all walks, including the front sidewalk along Auburn Avenue, were of unmortared, herringbone-patterned brick.

Significance

William Howard Taft National Historic Site, designated on December 2, 1969, preserves the birthplace and boyhood home of the 27th President of the United States. The house saw the birth of Taft on September 15, 1857 and witnessed his growth into manhood. Taft's association with the house ended, except for his visits in later years, with his matriculation

at Yale University in 1874. This house is the only structure surviving which is associated with Taft and his family at William Howard Taft National Historic Site.¹

1. Arbogast, David. National Register of Historic Places--Nomination Form, William Howard Taft National Historic Site. 1976.

III. HISTORICAL ANALYSIS

III. HISTORICAL ANALYSIS

=====

Major references to the brick walkways are listed below in chronological order (date of publication). Each of the references is followed by an analysis (except for those references which are self-explanatory). A summary of the references is found at the end of this section on page 40.

1. Major Charles Ross McCollough, William Howard Taft National Historic Site: Historic Grounds Report (National Park Service: 1 October 1971), p. 33.

Plate VIII (dated ca. 1920) [see Figure 3.1] shows a vertical or covered grape arbor leading eastward from the Southeast corner of the house and paralleling a brick walkway which may have led out to the privy--the historic status of this feature has not been determined.

ANALYSIS: This is the first reference we have of a walkway to the privy east of the house (other references follow).

2. Ibid., p. 35.

A front [west] stone wall and iron fence, similar to the present configuration, probably were in place when the Tafts took possession of the property in 1851. The only significant early alteration to the front of the grounds took place on November 20 when Hunt and Lull, having completed their work on the back addition, paved the front walk; the paving would have consisted of brick laid in a herringbone pattern, but it is not certain whether the reference is to the Auburn Street sidewalk or to the Y-form walk on the front lawn; the latter is the more probable alternative. In the ensuing years, street alterations and the tendency for their lot to erode away down the hill required frequent and costly repairs. On July 3, 1859, Alfonso paid \$16.17 to gravel his 100-foot stretch of Auburn Street; on January 24, 1862 he repeated the operation with "broken stone" at a cost of \$21.57. Later in 1862, Peter Rawson Taft reported that a wall was

being laid for the front fences (November 4) and that a Mr. Murry laid a sidewalk of herringbone-patterned brick along the Auburn Street frontage (December 2).

ANALYSIS: Major McCollough believes the front "Y-form" walk in the front yard was paved in November 1851. Eleven years later, when major work was being undertaken in Mt. Auburn, there is indication that the sidewalk along Auburn Street was paved.

3. Ibid., p. 48.

[The grounds in 1971:] Other artifacts and features which are best described in relationship to the South property line and easement are: well-dressed sandstone blocks, approximately eight inches square and five feet in length, imbedded in the earth and seeming to define a part of the northern curbing of a brick walkway which existed in 1920 (Plate VIII) [see Figure 3.1] at a point just South of the rear of the house; identical blocks, arranged in a trapeziform lacking the base and imbedded in a modern concrete walk off the South side of the front portion of the house and just outside the eastern side of the former bay window which was removed as a part of the 1964 restoration (the blocks formed the lip of a coal chute to the basement). . .

ANALYSIS: It is not clear which walkway McCollough is referring to when he describes the "1920" walkway in his Plate VIII (see Figure 3.1). The only brick paving visible in Figure 3.1 is of the extension of the brick areaway on the south side of the basement between the house and the retaining wall, described further in this report. As seen in Figures 3.2 and 3.3, there were limestone steps uncovered during an archeological survey at the southeast corner of the house in 1974. These are assumed to belong to the terminus of the concrete sidewalk which led around the south side of the house past the south porch--attributed to Bellinger (see Figures 3.4 and 3.5). McCollough might have been describing this walk; however, it is concrete. The other sandstone blocks ("in a trapeziform") he refers to are delineated

on Figure 3.6 are reported to belong to the coal chute, and therefore are not included for further discussion in this report, since they have no connection to the brick walks. Also, the entire length of concrete walk in this area, and the brick paving underneath (see Figures 3.7 and 3.8) are non-historic.

4. Ibid., p. 50.

[The grounds in 1971:]Concrete walkways on the property, as well as stairways with the exception of that at the front entrance, seem to be entirely non-historic, although they essentially follow the paths of the historic features, as indicated in the ca. 1868 photograph [see Figure 3.9]. Archaeological work has already revealed a patterned brick walkway paralleling the South wall of the house (in the form of a preserved segment, which may or may not be historic, under the Larger South Porch . . .). It seems likely that all walks were of unmortared patterned brick, including the front sidewalk, as indicated by the above evidence and the ca. 1868 photograph [See Figure 3.9].

5. Major Charles Ross McCollough, William Howard Taft National Historic Site: Archeological Investigation of Grounds (National Park Service: 1 June 1972), p. 20.

Initial excavations were carried out in the strip of earth to the South of the foundation extension, and the removal of 0.2 feet [about 2 1/2 inches] of modern trash and humus revealed a section of a herringbone patterned unmortared brick walkway (Feature #3) [see Figure 3.10], approximately 4.0 feet wide and 10.0 feet long, oriented East-West and reaching from the modern concrete walk on the west side to the Southeast corner of the 1971 porch foundation (Fig. 1 and Plate VI) [see Figures 3.10 and 3.11, respectively]. This walkway, preserved in good condition, is believed to be similar to those which were built almost exclusively during the historic period, if it was not in fact built by the Taft family. It was overlaid and thus rendered unusable by the floors of both the 1971 and 1920 porches, but there is uncertainty as to how long before the latter date it was constructed.

ANALYSIS: McCollough assumed the brick "walkway" discovered under the south porch was from the historic period, resembling other historic walkways found on the site.

6. Ibid., pp. 25-26.

Privy Walk Test NE. [Not included in fiscal year 1988 reconstruction] Peter Rawson Taft's diary contains a few brief references to a privy which was constructed in the autumn of 1851, soon after Alfonso Taft purchased the Auburn Street house and while the brick addition to the house was under construction; it is known that the privy stood over a vault fourteen feet in depth and that Peter Rawson Taft "paved a way" to it in 1851 (cf. McCollough 1971: 14 and 22), but additional details, including the location of the structure and the approximate date of its abandonment as a functional part of the household, are lacking. It is assumed that for convenience' sake the privy was located within 100 feet of the house. The configuration of the lot dictated that the structure be behind the house, and further that the "privy walk" depart the rear of the enlarged house. It was thus considered likely that the privy vault could be located and identified by archeological means on the small portion of the back lot which remains as a part of the Historic Site and that test excavations off the Northeast and Southeast corners of the house would reveal a brick- or flagstone-paved "privy walk"; following this walk eastward away from the house would at once delineate the course of an historic walk and simplify the location of the privy outbuilding to which it led.

The first test for the walk was placed just off the Northeast corner of the house and consisted of two intersecting perpendicular trenches, each two feet wide and ten feet in length (Fig. 1) [see Figure 3.10]. Mr. Paul V. Kiel's tests of foundations and downspouts had disturbed the area abutting the corner of the building (incidentally revealing that the cement sidewalk at this corner was poured over an earlier herringbone-patterned brick walkway), and the 1971 trenches were accordingly centered at distances of six and nine feet from the east and North walls of the house, respectively; this configuration of trenches was designed to transect the path of a walkway which might have led westward from the corner of the building or the area in front of a "kitchen" door in the rear of the North wall. The results of the test were negative in that no such

walkway was encountered, but a few relevant artifacts were recovered

ANALYSIS: In his attempt to locate the "privy walkway" at the northeast corner of the house, McCollough dug the exploratory trenches described above. He was unsuccessful here. However, as he describes in reference 8 below, in Transect "A" he had more success. Kiel's exploratory trenching at the northeast corner of the 1851 addition, carried out in the 1960s, revealed historic herringbone patterned paving. This is the same paving which Bauxar (see reference 13, page 26) reported during the 1971 investigations conducted by the Denver Service Center. McCollough attempted to locate the "privy walkway" near the northeast corner of the addition. However, as one can see in Figure 3.10 (his Figure 1) the exploratory trenches probably were not close enough to the building to uncover any evidence. The walkway at the south side of the house was historically eighteen to twenty-four inches from the south exterior wall. McCollough's trenches were six and nine feet from the exterior walls. He attempted to locate a walk as it may have led around the corner toward (perhaps) the carriage entrance, and apparently was unsuccessful. The historic brick walk which Kiel discovered (and Bauxar verified) at the northeast corner of the 1851 wing, and associated material, were removed when the new foundation was installed (1982).

7. Ibid., pp. 30-31.

The truncated remains of herringbone-patterned brick paving (Feature #7) [see Figure 3.10] shown on a ca. 1920 photograph (McCollough 1971: Plate VIII) [see Figure 3.1] were found at the eastern edge of the cement sidewalk (Plates XVII and XVIII) [see Figures 3.12 and 3.13, respectively], incorporated in the base of the Level II humus and resting directly on the surface of

undisturbed clay subsoil (Level III). This paving, which without other evidence would seem to be a narrow brick walkway overlaid by cement, similar to others located near the house walls, represents only a portion of a large paved area at the Southeast corner of the house. The paving ran westward from the corner of the house, parallel to the South wall, to form the floor surface of the basement chamber beneath the solarium, as indicated in an area at the rear of this room which was not given the cement covering. To the East of the excavated fragment of paving, there was at one time a brick surface of considerable area, perhaps giving way on its East side to a walkway stretching further eastward and flanked by a grape arbor (McCollough 1971: Plate VIII) [see Figure 3.1]. No trace of the larger paved area or the walk extension was found in the humic level of the test excavation; the ragged edge of brick paving which protrudes from beneath the cement walk on its East side (Plates XVII and XVIII) [see Figures 3.12 and 3.13] probably indicates that much of the brickwork behind the house was removed after ca. 1920, leaving only that portion which served as a convenient footer for the modern cement walk flanking the house.

ANALYSIS: McCollough states this particular section of brick paving once belonged to a "large paved area at the southeast corner of the house." As can be seen in Figure 3.1, this "paved area" can be seen as a continuation of the "areaway" under the piazza along the south side of the house. All of the paving in this area was removed during the 1974 restoration and subsequent foundation and drainage work around the Taft home. Only the "areaway" has been restored. No evidence of the "larger paved area" was found, according to McCollough--except for the photo of the southeast corner (Figure 3.1).

8. Ibid., p. 42.

Feature #12. Brick fragments incorporated in the base of the historic humus, sectioned in the South wall of Transect A [see Figure 3.14], between points 17.0 and 21.0 feet east of the W90 line. This four-foot section of brickwork represents the North edge of a patterned and unmortared walkway, its path oriented East-West. It is hypothesized that this is a fragment of the "privy walk" (cf. supra, pp. 25-26; McCollough 1971: 14 and 22)

which originally led eastward from the brick-surfaced area immediately behind the Southeast corner of the house to a privy outbuilding on the rear lot.

It was hoped that the continuous path of the brick walk would be exposed as the excavation of Transect A was continued to the East. Between points 21 and 32 feet East of the W90 line, there was no trace of the walk, possibly because its path was slightly offset to the South through this distance, but the northern margin of a second long fragment of identical brick paving (Feature #13) [see Figure 3.10] was sectioned in the base of the historic humus in the South wall of Transect A, stretching between points 32 and 44 East of the W90 line There was no trace of structural remains, a privy vault, or disturbance of the historic humus or underlying subsoil immediately to the East of Feature #13, and Transect A was consequently continued eastward in the hope that additional walkway fragments and/or indications of the privy could be found near the rear of the lot. As this work continued and the historic humus level was followed in its gentle downward slope toward the East, it was noted that the humus level became thicker (to a maximum thickness of 1.8 feet, at a point 65 feet East of the W90 line), while being entirely devoid of artifacts;

ANALYSIS: The edges of a four-foot and approximately eleven foot, six inch length of the privy walkway were uncovered in Transect 'A' (see Figure 3.14). McCollough does not describe the type of brick or the pattern, but the fact that the brick was "unmortared" leads one to suspect that this walk was indeed the privy walk. As is seen in Figure 3.14 (profile of Transect A), this section of walk was between five and six feet below present grade, following the sharp drop-off to the east. McCollough assumed this walk was a continuation of a larger paved area at the southeast corner of the home. A graphic senario might be that the areaway continued east, as McCollough describes, to encompass the area around the well. From this area the privy walk headed east, as depicted on Figures 3.15 and 3.17.

9. Edwin C. Bearss, Historic Structure Report, Historical Data--Home
(National Park Service: October 1972), p. 12.

Hunt & Lull in the third week of October 1851 put a crew to work paving walkways behind and north and south of the house. They were still laying pavement in November. Lull on the 19th sent for 1300 paving bricks, while Grandpa Taft graded the back yard. The next day, the 20th, they finished paving the front walk, but to do so they had to send for another 1300 bricks.

On February 27, 1852, Grandpa Taft purchased 300 paving bricks and replaced those that had cracked during the winter. The following month he paved a walkway from the rear of the house to the privy. [Peter Rawson Taft Diaries, Oct. 15-Nov. 20, 1851, L.C. William Howard Taft Papers, Series 11.]

ANALYSIS: This reference points out, among other things, the possibility of a walkway on the north side of the home. This work coincided with the construction of the forty-one by twenty-three foot addition to the east, which was begun in June 1851, closed-in in October, and finished (including interiors) in November 1851. The "north" walkway would most likely have incorporated the carriage entrance (into Room 004) and the north entrance into the Dining Room (Room 005) and perhaps have led around to the Hallway (Room 009). Utilizing a reverse perspective projection on the historic photograph (Figure 3.9) it was determined that the brick walk leading to the south was between three feet, eight inches and four feet wide. Using the dimensions of the historic brick which Bauxar recorded (8-1/4 inches by 4 inches by 2-1/2), and overall width of approximately three feet, nine inches, the 1300 bricks would have built only approximately sixty-five lineal feet of three foot, nine inch walk. As seen on Figure 3.15, to pave the entire grounds as McCollough had envisioned would have required approximately 356 lineal feet of walk and over 7,000 brick.

Therefore, by these measurements, the 2,600 paving brick could not have accomplished all of the walks shown on Figure 3.15. Accomplishing the walks we are sure existed historically (walks numbered 2, 3, 6, and 7 as explained in Chapter 5 of this report) would have required approximately 4,000 paving brick. Given allowances for exact brick measurements, joint widths, exact walk width, and exact walk design (layout), the reference to the 2,600 paving brick mentioned in the above historical account leaves many questions unanswered. See Figure 3.16 for a graphic analysis of the above explanation. There is, however, some discrepancy with the above quotation from Bearss' Historic Structure Report. Actual entries from Peter Rawson Taft's diary (microfilm copy from the Manuscript Division, Library of Congress) entries referring to brick paving are as follows:

September 29, 1851: ". . . paved a way to Privy . . ."

October 9: ". . . worked at paving cellar . . ."

October 21: ". . . paved the cellar windows . . ."

October 25: "Lull not pave today on account of rain. All he did was to cut in the brick on the south side of the house in the Area-have paved the area [brick areaway at the southeast corner of the house] yesterday. Got one of the large cistern top of the well."

October 28: "Lull paved part of a day perhaps 2/3."

November 6: "Hunt and Lull bill for all their work 412."

November 18: ". . . Hunt and Lull worked paving and Henry their Dutchmen [sic] tended them . . ."

November 19: ". . . Lull paved & Henry tended him. Sent & got 1300 paving brick & worked grading back yard."

November 20: ". . . Hunt and Lull finished paving the front walk."

February 27, 1852: ". . . got 300 paving bricks and

mended pavement."

March 1: "Hunt dr to Brick about 1,500."

March 22: ". . . paved way to Privy."

There is no mention of paving brick paths during the month of October 1851 in Peter Rawson Taft's diary. Actual brick quantities are listed for November 20, 1851 (1,300); February 27, 1852 (300); and March 1, 1852 (1,500). The March 1 entry is very cryptic, however. In any case, whether 2,600 or 2,800 paving brick were used, the fact remains that either number would not have been sufficient to pave the areas which McCollough asserts existed historically.

10. William J. Miller, William Howard Taft National Historic Site, Historic Structure Report (National Park Service: 1974), pp. 5-6.

Northwest Sidewalk: A further reexamination of the historic photograph, approximately 1868 [see Figure 3.9], showing the Taft Family, raises some question in this author's mind as to the existence of a sidewalk illustrated on the McCollough drawing [see Figure 3.17], extending from the northwest corner of the front porch on the west facade of the 1819 [sic: 1840] wing. Sidewalk mentioned extended northward to approximately the northwest corner of the wing and then curves slightly eastward once again turning northward to a set of steps which in turn descended to a walk connecting the historic north entrance ["carriage entrance"] on the 1851 wing. There does not seem to be the conclusive evidence in the subject photograph to justify the assumption that this walk existed.

ANALYSIS: Ground investigation in October 1986 resulted in similar findings. Each of the existing concrete sidewalks was investigated for evidence of historic remnants of brick walks. Shallow digs were performed along each of the existing walks to determine if the brick walks existed somewhere below. As well, the ground was probed in the vicinity of the circa 1868 photograph (Figure 3.9) brick walk

locations. In each case the results were negative. From the historic photograph one can make out the main run of herringbone patterned brick walk from the entrance gate to the front (west) door. Another brick walk can be seen leading off of this main walk curving around to the south side of the home. The Burkhardt home originally had a similar curving walk leading to the north side of the home (Figure 3.18), however, it would involve conjecture to assume that a similar walk to the north on the Taft property existed. Certainly for convenience sake such a walk would have been probable. A contemporary photograph taken in March 1987 (Figure 3.19) approximates the vantage point of the circa 1868 photograph (Figure 3.9). The concrete walk leading northward is hidden behind a small berm of grass. It is very possible that a similar condition existed when the historic photograph was taken (the brick walk leading down and northward toward the carriage ramp/entrance may have been obscured by being in a small depression in the front yard).

11. Ibid., pp. 7-8.

South Sidewalk - Historic Site: During the 1974 restoration a portion of the sidewalk on the south side of the 1819 wing was removed and replaced with concrete. It was discovered during the excavation for this replacement sidewalk that in fact the concrete sidewalk existing at the start of the 1974 restoration had been in fact placed over an earlier, much older, brick sidewalk.

Character, and size and color, of the bricks uncovered is not unlike those found in connection with certain parts of the actual historic structure. The bricks are of very early type sand mold, hand made, clay fired to a medium degree of hardness. Documentation was made of the uncovered brick walk at the time of the excavations during the 1974 restoration and specimens of this brick have been retained and stored in the present Taft site.

ANALYSIS: Miller asserts the brick uncovered in this area (see Figures 3.7 and 3.8) would have been appropriate historically. However, Perry's in-depth analysis of brick types and patterns (see references 25 through 33 below) discounts this assumption. Consistently, historic paving was covered (probably by Bellinger) with newer brick paving and then with concrete. The pavers which were overturned when the south walk was lifted are similar to the McManigal bricks which Perry describes as dating to the early 1900s. In assembling the research for this report, this author discovered the historic paving was consistently diagonal herringbone in pattern and dry-laid (unmortared) and set in sand. The walk at the south had mortared bricks set at a ninety-degree herringbone pattern. Since we know that there was a walk which led from the front around to the south, we can assume that it terminated at the south piazza. Further analysis (see Superintendent Kessleman's memorandum on page 111) indicates the south piazza may have been as far as this south walk would have gone.

12. Ibid., pp. 9-10.

Historic North Entrance And North Walk: Historic structures in Cincinnati similarly arranged and situated to the Taft historic structure, that is a lower level carriage entrance such as the Taft Historic north entrance, which existed at the time of the 1974 restoration, were intended to serve as a second means of guest entrance, particularly during inclement weather.

The most specific and outstanding example of a similar type of entrance is the Taft Museum in Cincinnati, formerly the residence of the half-brother of President William Howard Taft.

The McCollough drawing [see Figure 3.17] indicates a walk pattern extending from the historic north porch in a curvilinear manner, heading northward and westward to a point terminating with the earlier discussed front

yard steps. This author, during the 1974 restoration, witnessed the uncovering of a concrete walk describing approximately the plan configuration illustrated on the McCollough drawing. No excavation was made adjacent to the walk during this author's involvement.

Unless excavation reveals to the contrary it is this author's considered opinion that there does not exist conclusive evidence concerning the existence or nonexistence of this curvilinear walk.

Based on the probable location of the historic carriage entrance, it would seem more feasible that any walk serving the north porch ["carriage entrance"] from the carriage entrance driveway would have extended directly northward from the north historic porch ["carriage entrance"] rather than curving as the walk indicted on the McCollough drawing.

During the 1974 restoration work a new storm sewer service connected to the roof drainage downspouts was installed; this service terminates in a catch basin manhole situated in what quite probably was the historic carriage driveway. During excavation for the manhole no evidence of any type of historic paving was uncovered.

ANALYSIS: Miller's assertions are correct: There is no precedent to assume that the curving walk which shows up on the McCollough drawing (and which exists presently in the same location) was installed to replicate a historic walk in the same location. As stated earlier, such a walk seems logical for convenience sake, for access to the north and east sides of the home. A possible assumption is that when the historic walks were replaced with modern concrete that the placement and configuration of the new was exactly as what existed historically, as was the case in the discoveries at the back (east) of the house. However, there is no evidence to back this assumption up. Any location or configuration will be entirely conjectural. Ground investigations in October 1986 along this north walk did not reveal additional information. A recent (June 1987) photograph of the Taft museum (see Figure 3.20) really does not support Miller's assertion. It is very

likely that what is seen in the photograph of the north facade is the result of recent alterations and never existed historically. Also, the site arrangements for the Taft museum and the Taft home are not identical. And, the home and museum are not of the same historic period or architectural style.

13. Deborah K. Bauxar, William Howard Taft National Historic Site, Archeological Investigation of Foundation and Cistern (National Park Service, Historic Preservation Division, Denver Service Center: December 1975), p. 1.

Areas of study for us were along the exterior of the east and south walls of the 1851 addition . . . The surface was a contemporary concrete sidewalk. Beneath this was a brick walk and beneath that was an historic herringbone patterned brick walk [see Figure 3.21]. These bricks are 8 1/4" x 4" x 2 1/4" - 2 1/2".

14. Leslie A. Perry, Unpublished Field Notes: William Howard Taft National Historic Site. (Midwest Archeological Center, National Park Service: April 27, 1982 - May 5, 1982), p. 4.

Near the NW [northwest] corner of the house, on both sides of present walk way, additional varieties of materials were found in Tr[ansects] 9 & 10 [see Figure 3.23 for all references contained in these field notes] (e.g. shell button, flat & curved glass, butcher bone frag[ment], plus usual brick/ mortar/cinder).

ANALYSIS: Perry located many fragments of brick in her shovel testing and shovel probing during the spring 1982 archeological investigations. Many of these fragments may be attributed to the two building expansion episodes: The 1851 addition of the east wing, and the 1877 remodeling after the fire, rather than location of brick walkways.

15. Ibid., pp. 9-10.

Began XU [excavation unit] 4 at base of hill near north side entrance [the "carriage" entrance]. Placed near (N) [north] Tr[ansect] 1/1 which had a horizontal limestone slab mortared & abutting a brick w/a McMa[nigal] stamp. Believed the limestone & brick, which are immediately W[est] of the present side walk leading to basement entrance [sic]. Limestone "flagging" does not appear to continue to the N[orth]. The unit has produced a lot of brick frag[ment]s & two pc [pieces] of dressed marble flagging in the N[orth] 1/2 of unit.

ANALYSIS: The McManigal brick was identified as non-historic (i.e., not belonging to a historic brick walkway). See Perry's description of brick types, reference 30, on pages 35-37.

16. Ibid., pp. 11-12.

XU [excavation unit] 4 has been expanded to south (not screened). Picked up more of the brick & limestone walkway. May be part of the carriage landing (limestone) & possibly a brick walkway leading around N[orth] side of the house.

ANALYSIS: Excavation unit 4, near the carriage entrance, contained a number of McManigal bricks. According to Perry's analysis (see reference 30 on pages 35-37) the brick was not from the historic period.

17. Ibid., pp. 12-13.

According to Sam W., it was not known whether a walkway wrapped the base of the north yard slope. To see whether the brick paving in XU 4 continued in this direction two additional shovel tests were dug & two existing tests were expanded. The 1st was located between Tr[ansects] 1 & 2 & abutted present side walk. # 2 was between Tr[ansects] 3 & 4. Tr[ansects] 5/6 & 6/6 were expanded. [The references to "Transects" 5/6 and 6/6 are misstated. The correct reference should be "Shovel Tests 5/6 and 6/6."] Direct evidence for the sidewalk was found in the 1st two, but not the 2nd two. The tests are described below.

#A . . . 30-41 [cm] - horizontal paving brick

#B [The "second" additional shovel test] . .
.artifacts - large soft orange brick (at angle) lying
horizontally at ca. 35 - 40 cm; . . .

ANALYSIS: The additional shovel tests Perry mentioned as lying between Transects 1 and 2, and between Transects 3 and 4, appear as shovel probes "A" and "B," respectively, on Figure 3.23. The "expanded" shovel tests 5/6 and 6/6 are labeled "C" and "D" respectively on Figure 3.23. As Perry notes, Shovel Probe "B" disclosed "large soft orange brick at an angle." This description is of the historic brick, which tells us that she may have found a portion of the historic brick walk in the vicinity of Shovel Probe "B." Perry does not elaborate on this finding, however. Additional brick was not discussed, nor was method of bedding. The brick might have been a remnant from one of the building episodes. Additional archeology will be needed in this area to provide more conclusive evidence.

18. Ibid., p. 17.

SP's [shovel probes] E & F were placed to the S[outh] & W[est] of [shovel probes] C & D in order to see if "historic" walk curved sharply up the hill instead of present course of walk. Both failed to provide any architectural info. Their profiles duplicate the second to the last ST's [shovel tests] in Tr[ansect]s 5 & 6.

ANALYSIS: Perry attempted to prove if a historic brick walk might have turned sharply west after existing the carriage entrance. She was unsuccessful in this venture. Therefore, either the historic walk followed the existing concrete walk exactly (if there was indeed a brick walk in this area), or the walk turned even more sharply westward after leaving the carriage entrance. Again, additional archeology will

be needed in this area to determine existence or non-existence of a historic brick walk in this area.

19. Ibid., pp. 17-18.

SP [shovel probes] G & H were placed on the N[orth] or E[ast] side of present walk in gravel area. . . . In the SW profile of each, portions of the "historic" sidewalk as it curves from N[orth] to W[est]. The brick coarses [sic] lay vertically directly under the edge of the present sidewalk in [shovel probe] G. It lay to the W[est] of the E[ast] edge of the concrete walk in [shovel probe] H (i.e. in [shovel probe] G the paths of both coincided, but not in [shovel probe] H; the earlier path curved more sharply to the W[est] near the basement ["carriage"] entrance. G was profiled & photoed [sic]. Profile map indicates that the cement sidewalk was underlain by dk [dark] brown clay w/no gravel as was found in [shovel probe] A. Below this was a layer of orange clay then the bricks of a mottled brown/tan clay. Only on[e] layer of cement (the present sidewalk) was found in [shovel probe] G, unlike [shovel probe] A where two distinct layers were found (one immediately above capping the brick).

ANALYSIS: This is the first conclusive evidence that a historic walk existed, leading from the carriage entrance slightly north toward the carriage drive, and, according to Perry, then sharply turned west. The documentation refers to the walk as "historic," so the assumption is that there was indeed a brick walk which led westward from the carriage entrance to a point in the north-west yard. These disclosures occurred very close to the house, however. It is still unclear the exact course the "historic" brick walk traveled once it exited the north carriage entrance past this area. It is interesting to note the finding of two layers of concrete sidewalk in shovel probe "A." (Refer to Figure 3.23 for locations of shovel probes).

20. Ibid., p. 18.

[Shovel probe] I [had] similar strat[igraphy], but no evidence of brick walkway (even w/poking under present [concrete] walk.

ANALYSIS: It is possible that later construction episodes destroyed traces of the walk in this area. As can be seen in Figure 3.23, this shovel probe is very close to the house.

21. Ibid., p. 18.

[Shovel probe] J-K - along present sidewalk on N[orth] side of wing . . . At ca. 25-30 [cm] a brick paved area (not herringbone) appeared. A brick walk is apparent beneath present [concrete sidewalk] paved area. [It] is above the other paved area.

ANALYSIS: Two brick paved areas appeared in shovel probe J/K: A brick walk directly beneath the concrete sidewalk and a second paved area beneath the "brick walk." The lower paved area was not herringbone. Perry did not say if the "brick walk" was herringbone patterned.

22. Ibid., p. 22.

[Shovel probe] L - around [north-east] corner of wing - highly disturbed area w/brick frag[ment]s. Earlier paved area doesn't continue there - may have been destroyed w/the sidewalk construc[tion].

ANALYSIS: Paul Kiel (see reference number 6) apparently discovered a portion of the historic brick walk in this area. As Perry asserts, it may have been destroyed by later construction.

23. Ibid., p. 22.

[Shovel probes] O & P - N[orth] side of sidewalks on N[orth] side [of] pre- [sic: post] 1851 wing in asphalted port[ion] of drive. . . . No evidence of brick walk (from XU [excavation unit] 4).

ANALYSIS: According to these field notes, Perry did not find evidence of a brick walk near the northernmost section of the existing concrete sidewalk. As she noted (in reference number 19 above), she believed a brick walk curved more sharply toward the west after exiting the carriage entrance. The negative results in shovel probes "C," "D," "O" and "P" support this possibility. However, additional archeology will be necessary to confirm this.

24. Ibid., pp. 23-24.

XU [excavation unit] 6: . . . Paved brick area seen in [shovel probes J & K appeared btwn [between] [cm] 20 & 30. Only portion (N[orth] side) of brick paving remains. It is not herringbone pattern. Bricks laid into sand. S[outh] side of paving is disturbed by a dk [dark] fill intrusive zone. Zone has mixture of 19th & 20th c[entury] materials. Beneath this is sterile clay. Remaining bricks sit on sand & then on sterile clay . . .

S[outh] profile . . . shows . . . brick sidewalk laid in cement not sand. . . . Dist[urbed] area seems to under- lie at the least a portion of the present [concrete] sidewalk/brick walk - both are earlier than paving at 25-30 cm.

ANALYSIS: This area of paving is believed to belong to the large brick "patio" at the north side of the house (see reference 32 below), which is non-historic.

25. Leslie A. Perry, 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio. (Midwest Archeological Center, National Park Service: June 1983), pp. 13-15.

Archeological Excavation Unit XU 4: [See Figures 3.23 and 3.24]: . . . Below the second soil layer was a dark brown loam mixed with clay. Bottle glass, window glass, and mortar were recovered and brick paving . . .

was revealed at a depth of 33 cm [13 inches]. The paving consisted of vitreous street paver bricks with the maker's mark of "MCMANIGAL". The bricks had been capped with a thin layer of tar and then covered with modern cement. A desultory [random] paving pattern was revealed in the southwest corner of XU 4 when the cement was chipped away. The paved area had a slight upslope trend to the west. To the north, the area seemed to merge with a brick walk constructed with the same (Feature J) [See Table 1, Figure 3.29] bricks. This walk curved around the north yard toward the west and was capped with cement in 1979 (Sam Witherup, personal communication 1982) In sum, this area was highly disturbed by 20th century architectural activities. There appears to be little evidence of intact materials relating to the Taft occupation of the site.

ANALYSIS: Evidence of brick paving utilizing the McManigal bricks was found in the vicinity of the north carriage entrance. The following discussion in the Perry report summarizes the relevance of various types of brick found at the site.

26. Ibid., pp. 15-17.

Archeological Excavation Unit XU 6: . . . The first zone (0-8 cm) [0-3 inches] consisted of modern gravel, with a layer of medium tan and yellow sterile clay beneath. Along the southern edge of the unit [excavation unit 6], a brick sidewalk (Feature I [sic: Should be listed as Feature 'L']) was visible directly beneath the contemporary cement walk (Figure 4) [see Figure 3.26]. This walk was observed by McCollough (1972:25) and Bauxar (1975) during earlier testing. Although no maker's marks were visible, the bricks were street pavers set in cement similar to those noted in the MCMANIGAL brick walk extending from XU 4. Therefore, this walk probably also represents a post-Taft era walkway.

Finally, beginning at ca. 27 cm [10 1/2 inches], there was a zone of very dark brown clay This zone laid directly above a fragmented portion of brickwork which consisted of soft medium orange common bricks set in sand in a herringbone pattern. The brickwork lay directly on sterile medium yellow clay and corresponds to brick work encountered by McCollough (1972:17) on the south side of the house. Based on an

1870 photograph, the brickwork south of the structure was the:

. . . southern remnant of the 1851 "back piazza." This early structure stretched across the rear of the main (1848) house when the Tafts took possession in July of 1851 and was partially or wholly dismantled in October of that year as work progressed on the rear brick addition. (McCollough 1971:13-14).

The brickwork seen in XU 6 (Figure 4) [see Figure 3.26] was disrupted by the construction of the east wing and again by the installation of plumbing during the 20th century (McCollough 1971). To the west of the unit in Shovel Probe J, portions of two or more broken ceramic sewer pipes intruded. The earlier brickwork ended abruptly, on the east side, probably as a result of earlier excavations (Bauxar 1975; McCollough 1971:25). To the south, the contemporary sidewalk and the north foundation of the east wing disrupted the earlier brickwork. These disturbances explain the mixture of 19th and 20th century materials observed in the cultural zone.

ANALYSIS: The first encounter of brick paving (those set in cement and resting about three inches below ground) was determined to be non-historic. The section of brick below this level (about 10-1/2 inches below ground) appears to be historic--given the method of setting (dry-laid) and as compared to the south "areaway" brick discovered at the southeast corner of the kitchen.

27. Ibid., pp. 22-25.

Along the southern border of the [XU 10] unit, resting on sterile clay, were five bricks laid in a disrupted herringbone pattern (Figure 8) [see Figure 3.27]. As in XU 6 and the south porch area excavated by McCollough (1972:30), the bricks rested on sterile clay. In association with this was a roughly dressed limestone rock measuring ca. 8 cm [about 3 inches] in thickness. The surface of the bricks was 13 cm [about 5 inches] below the surface of the footer, while the top of the rock was parallel with the top of the footer and the foundation line in the interior of the basement (Figure 8) [see Figure 3.27]. All artifacts lay on top and in between the bricks. No materials were recovered from

beneath either the bricks or the rock (Jeffery Richner, personal communication, 1982).

ANALYSIS: This area occurred within the basement area of the east wing, and thus would be a pre-1851 brick walk which led around to the back. This walkway resembled the south areaway paving in type and installation method.

28. Ibid., p. 26.

Excavations in the north yard near the north carriage entrance to the house revealed three architectural features. These consisted of: 1) a possible 19th century razed retaining wall (Feature E) [see Table 1, (Figure 3.29) for a list of features, and Figure 3.24 for a site plan showing locations of these features]; 2) a probable turn of the century brick walk (Feature K); and 3) an apparent 20th century paved patio (?) area with associated French drain (Features F-I). Because of disturbance from 20th century activities, archeological deposits are highly disturbed in this portion of the site. For that reason, dating these features requires the use of both archeological data and historic documents. . . .

Brick Walk. Feature K was identified as a brick sidewalk made of vitreous street paver bricks bearing a MCMANIGAL maker's mark. The sidewalk traces a route from the carriage entrance to the front door. Shovel probe testing indicated that the brick sidewalk either does not follow original historic placement of this walk or portions of it have been disrupted by the installation of sewer lines. If descriptions of the brickwork at the time of the 1851 remodeling were extant, these might clarify the construction date.

Patio and Drain. These features clearly date from the 20th century. An examination of associated artifacts and of 20th century photographs, however, might provide a more refined construction date.

ANALYSIS: The brick walk ("Feature K") which Perry describes as "tracing a route from the carriage entrance to the front door," by the nature of the brick variety, would be classified as post-Taft. She does not elaborate on the theory that the walk traced this path,

however. No further mention is made of excavations or discoveries of additional examples of such brick along this route. It is possible that Bellinger laid a new brick walk over the historic one, however. The "patio," which apparently was located near the northeast corner of the east wing, is non-historic.

29. Ibid., p. 28.

Brickwork and Interior Foundation Line. Brickwork in a herringbone pattern resting on sterile clay was noted in XU 6 [near the northeast kitchen entrance] and XU 9 [inside the east wing] below the cultural zone. In other units (e.g., XU 10), brick rubble was incorporated into the builder's trench for the north foundation line of the east wing. The origin of this brickwork is documented both historically and archeologically (McCollough 1971:13-14; 1972:17-19) and represents the remnants of the pre-1851 piazza extending from the rear of the original 1848 structure.

ANALYSIS: The brickwork described here is said to have belonged to a large piazza in back of the house, rather than to an historic brick walk. However, this piazza would have had to have been very large, extending some forty feet east of the house. This author's assertion is that the historic brickwork belonged instead to a brick walk paralleling the north side of the home.

30. Ibid., pp 41-45.

Description of Brick Types: [See Figure 3.23 and Table 1 (Figure 3.29) for locations of excavation units (XUs) and descriptions of features.] Common and paver bricks are present at the site. The first type tends to be medium to dark orange in color and is porous. The pavers are dark to very dark red in color and are more vitrified. In general, the common bricks appear to relate to 19th century construction phases while the pavers appear to be associated with 1900s activities.

Three varieties of paver bricks were noted: Carlyle, Union, and MCMANIGAL. . . . The [Ohio]

beneath either the bricks or the rock (Jeffery Richner, personal communication, 1982).

ANALYSIS: This area occurred within the basement area of the east wing, and thus would be a pre-1851 brick walk which led around to the back. This walkway resembled the south areaway paving in type and installation method.

28. Ibid., p. 26.

Excavations in the north yard near the north carriage entrance to the house revealed three architectural features. These consisted of: 1) a possible 19th century razed retaining wall (Feature E) [see Table 1, (Figure 3.29) for a list of features, and Figure 3.24 for a site plan showing locations of these features]; 2) a probable turn of the century brick walk (Feature K); and 3) an apparent 20th century paved patio (?) area with associated French drain (Features F-I). Because of disturbance from 20th century activities, archeological deposits are highly disturbed in this portion of the site. For that reason, dating these features requires the use of both archeological data and historic documents. . . .

Brick Walk. Feature K was identified as a brick sidewalk made of vitreous street paver bricks bearing a MCMANIGAL maker's mark. The sidewalk traces a route from the carriage entrance to the front door. Shovel probe testing indicated that the brick sidewalk either does not follow original historic placement of this walk or portions of it have been disrupted by the installation of sewer lines. If descriptions of the brickwork at the time of the 1851 remodeling were extant, these might clarify the construction date.

Patio and Drain. These features clearly date from the 20th century. An examination of associated artifacts and of 20th century photographs, however, might provide a more refined construction date.

ANALYSIS: The brick walk ("Feature K") which Perry describes as "tracing a route from the carriage entrance to the front door," by the nature of the brick variety, would be classified as post-Taft. She does not elaborate on the theory that the walk traced this path,

however. No further mention is made of excavations or discoveries of additional examples of such brick along this route. It is possible that Bellinger laid a new brick walk over the historic one, however. The "patio," which apparently was located near the northeast corner of the east wing, is non-historic.

29. Ibid., p. 28.

Brickwork and Interior Foundation Line. Brickwork in a herringbone pattern resting on sterile clay was noted in XU 6 [near the northeast kitchen entrance] and XU 9 [inside the east wing] below the cultural zone. In other units (e.g., XU 10), brick rubble was incorporated into the builder's trench for the north foundation line of the east wing. The origin of this brickwork is documented both historically and archeologically (McCollough 1971:13-14; 1972:17-19) and represents the remnants of the pre-1851 piazza extending from the rear of the original 1848 structure.

ANALYSIS: The brickwork described here is said to have belonged to a large piazza in back of the house, rather than to an historic brick walk. However, this piazza would have had to have been very large, extending some forty feet east of the house. This author's assertion is that the historic brickwork belonged instead to a brick walk paralleling the north side of the home.

30. Ibid., pp 41-45.

Description of Brick Types: [See Figure 3.23 and Table 1 (Figure 3.29) for locations of excavation units (XUs) and descriptions of features.] Common and paver bricks are present at the site. The first type tends to be medium to dark orange in color and is porous. The pavers are dark to very dark red in color and are more vitrified. In general, the common bricks appear to relate to 19th century construction phases while the pavers appear to be associated with 1900s activities.

Three varieties of paver bricks were noted: Carlyle, Union, and MCMANIGAL. . . . The [Ohio]

Historical Society possesses no information concerning the . . . MCMANIGAL brick companies (Conrad Weitzal, personal communication 1982). However, because of similarities in manufacturing and location on the site, it is assumed that all . . . paver varieties date from a 1900s period.

Discussion. . . . Materials from the front yard relate to the 19th century almost exclusively. Some of these were charred on all surfaces and may be attributable to the 1877 fire.

In the north carriage entrance area, red brick fragments occur more frequently. These fragments most likely relate to: 1) construction of the patio(?)/drain area observed in XU 4; 2) partial dismantling of some of the turn of the century or later plumbing in the east wing basement. The high frequency of orange brick fragments in this same area indicates that both 19th and 20th century construction was disrupted by these activities.

On the exterior of the east wing in XU 6, the high density of orange brick fragments undoubtedly resulted from the dismantling/destruction of the piazza during the construction of the east wing. Although no brick was collected from the interior of the wing, high densities of orange brick fragments were observed in the builder's trench for the north foundation of the wing. The only red bricks noted were the re-used bricks used to support a cement slab in the 20th century bathroom (Richner 1982).

Perhaps of greater significance than specific types and varieties of bricks is the different brickwork masonry observed at the site. Excavations at the site revealed four distinct types of brickwork. In terms of chronological sequence, the first type of brickwork consists of medium to dark orange common brick set into sand in a herringbone pattern. This is associated with the remnants of the pre-1851 back piazza observed in XU 6, XU 10 [see Figures 3.24 and 3.26], and in the south porch area (McCollough 1972:17-19). McCollough (1972:17) identified the same type of brickwork in a historic walk (his "Feature 3") that extended from the southwest corner of the wing and suggests that other masonry dating from the mid-19th century (i.e., during the Taft occupation) was similar in form (McCollough 1972:21).

A second style of brickwork entails street paver bricks (of the MCMANIGAL variety) set in cement in a herringbone pattern. This was observed in portions of the walk extending from XU 4 around to the front yard (Feature J) and in the walk adjacent to XU 6 (Feature

K). It is probable that these walks post-date the Taft occupation.

A final type of masonry [No mention is made of the "third" type of brick.] consists of MCMANIGAL street pavers bricks hap-hazardly [sic] laid in modern cement. This variety was observed around the drain in XU 4 (Features F-H). McCollough observed the same style in the 1970s south porch (now removed) and along portions of the southern boundary wall. These construction efforts are attributed to E.R. Bellinger who owned and later helped supervise attempts to restore the house between ca. 1940-1970 (McCollough 1972). It is speculated that the bricks used in these construction activities were salvaged from other areas of the site or adjacent lots which Bellinger also owned (XU 9).

Thus, the presence of medium to dark orange common bricks appear to indicate mid-19th century construction and either slightly pre-date or are contemporary with the Taft occupation. The darker medium to dark red street pavers in herringbone pattern may indicate a late 19th, or more probably, an earlier 20th century context. Street pavers laid in an irregular pattern point toward a probable 1940s-1970s context.

ANALYSIS: Herringbone pattern, medium to dark orange brick was found near the south areaway and is associated with the pre-1851 back piazza. The McManigal pavers discovered in XU 4 and adjacent to XU 6 are said to post-date the Taft occupation. The McManigal pavers "laid haphazardly in cement" observed near XU 4 and near the southern boundary wall are attributed to E. R. Bellinger, who tried to restore the house in 1940-1970. The medium to dark brick either slightly pre-date the Taft occupation or are contemporary to it. The darker brick are said to post-date the Taft occupation. In summation, according to the Perry archeology, the only pavers which may be attributed to the Taft occupation were found at the southeast corner of the kitchen and are associated with a piazza or area way in this location.

31. Ibid., pp. 77-78.

North Yard/Carriage Entrance Area: The brickwalk (Feature K) [See Figures 3.24 and 3.29] extending from XU 4 dates from the turn- of-the-century or later (i.e., it is non-historic).

Evidence in support of this contention comes indirectly from historical and archeological documentation. The brickwork consists of MCMANIGAL paver bricks set into cement and constitutes one of four different brickwork patterns observed on the site. This contrasts brickwork associated with the Taft occupation which is characterized by common brick set in sand (Bauxar 1975; McCollough 1972). In addition, the MCMANIGAL bricks are very similar in manufacture to the Carlyle bricks observed in the north retaining wall. These bricks have been tentatively dated as being produced sometime between 1907 and 1928 (Conrad Weitzal, personal communication 1982). Lastly, stratigraphic profiles in Shovel Probes G and H [see Figure 3.24] indicate that Feature K overlies at least two previous surfaces of the carriage drive. Combined, the historical and archeological information generally supports the view that the MCMANIGAL walk (and the contemporary cement walk overlying it) post-date the 1900s, and may not trace exact paths used during the Taft period.

32. Ibid., p. 78.

The patio and drain (Features G-I exposed in XU 4) were constructed by Bellinger. [North yard.]

There is no direct historical evidence to link the construction of these features to Bellinger, but the types of materials and construction methods are typical of other Bellinger projects. Specifically, the patio is constructed of MCMANIGAL bricks which possess remnants of cement and tar indicating they were salvaged from elsewhere and re-used for the construction of the patio/drain. A similar example of the re-use of bricks was observed beneath 20th century cement slabs in the east wing bathroom. By analogy, therefore, it seems likely that the patio/drain features relate to Bellinger. The modifications to the drain (an extension collar) may be related to Park Service activities.

33. Ibid., pp. 79-80.

The disrupted elements of the herringbone brickwork observed in XU 6 and XU 10 are remnants of the piazza located behind the original 1848 structure. Data in support of this contention come from previous historical documentation, field observations, and stratigraphy. According to McCollough (1971), a trellised piazza was located along the eastern border of the 1848 structure. This provided a patio area and access to the well and cistern located to the east of the house. It was dismantled during the construction of the wing which began in September. As he describes it: "On October 1 [1851], the back porch or piazza was taken down, suggesting that work (on the wing) had proceeded from East to West and that only at this time did they undertake to join the addition with the main part of the house" (McCollough 1971:14).

34. Tony Crosby, Historic Structure Report, Architectural Data Section (National Park Service: June 1985), pp. 10-12.

Hunt and Luss [sic: Lull], the masonry contractors for the 1851 wing and cistern, were paving walkways during October and November of 1851. The 2,600 bricks reportedly used would be enough for approximately 160' of 4'-wide walks. This would be the amount required for the walks from the front gate steps to the front porch and from that walk around the south side of the house to the east end. Undoubtedly, more bricks were used since there also was paving behind, or east, and north of the house (Bearss 1972, 12). It can be concluded that the walks in the [historic, circa 1868--Figure 3.9] photograph are the ones constructed by Hunt and Luss [sic: Lull].

ANALYSIS: A more current analysis of this (2,600) brick reference is found on pages 20-22 (reference 9).

SUMMARY OF REFERENCES

1. (Page 13): McCollough's first mention of a brick areaway at the southeast corner of the house which may have led to a privy.
2. (Pages 13-14): McCollough describes the historical paving of the front walk and the Auburn Street frontage.
3. (Page 14-15): The area south and southeast of the house is described here. McCollough makes references to sandstone blocks which "seemed" to form the border of a walk in this area; and other sandstone blocks which apparently formed part of a coal chute.
4. (Page 15): McCollough describes walks in general, saying that the concrete sidewalks found on-site in the early 1970s are not historic, and that "all (historic) walks were of unmortared pattered brick."
5. (Page 15-16): After the (non-historic) south porch was dismantled and removed, McCollough discovered a section of herringbone patterned unmortared brick walkway under the porch floor. He assumed this section belonged to a historic walk along the south side of the house.
6. (Pages 16-17): McCollough's investigations at the northeast corner of the house in search of the privy walk proved unsuccessful. He also describes investigations by architect Paul Kiel which uncovered historic paving at this corner of the house.

7. (Pages 17-18): McCollough's investigations at the southeast corner of the house revealed a "truncated" section of herringbone patterned unmortared brick walkway under concrete. He assumes this underlying section is from the historic period. Here we find the second of his references to a larger brick area which would have encompassed the well and possibly have continued east to the privy. It is this "larger brick area" which could have been a continuation of the south brick areaway.

8. (Pages 18-19): In his "Transect A," McCollough apparently discovered two lengths of the north edge of the privy walk. He describes both as being unmortared, "patterned" (possibly herringbone).

9. (Pages 20-22): Bearss describes the historic paving of walks by Hunt and Lull "behind and north and south of the house," and "from the rear of the house to the privy." The front walk was also paved at this time.

10. (Pages 22-23): Miller does not agree with McCollough's assertion that there was a walk or series of walks which led from the front walk north and east toward the carriage entrance. He, instead, believed the carriage entrance walk led due north to intersect the carriage drive.

11. (Pages 23-24): Miller believes the brick uncovered on the south side of the house during archeology in the early 1970s is historic.

12. (Pages 24-26): Miller describes lower entrances and cites, as an

example, the Taft Museum. He further refutes McCollough's description of the north walks.

13. (Page 26): Bauxar refers to her investigations in late 1974 which, generally, revealed concrete sidewalks on top of brick paving in two layers. She asserts that the lower of the two layers was historic.

14. (Pages 26): Brick found in transects 9 & 10 (Perry's field notes: reference 14 through reference 24).

15. (Page 27): Perry describes finding "McManigal" brick in excavation unit (XU) 4 near the carriage entrance.

16. (Page 27): Possible remnants of a brick walkway found by Perry in XU 4.

17. (Page 27-28): Paving brick was found in shovel tests between transects 1 and 2 which abutted the concrete sidewalk in the north yard. A second location in which brick paving was found was between transects 3 and 4. (According to the site map with Perry's field notes, the latter reference should be between transects 2 and 3). These shovel tests were located right at the south edge of the concrete sidewalk.

18. (Pages 28-29): Shovel probes "E" and "F," placed south and west of probes "C" and "D," in an attempt to determine if the north walk (which led from the carriage entrance north) made a sharper bend to the

west, rather than following the configuration of the existing concrete walk. The tests were negative as far as locating the historic brick walk in this area.

19. (Pages 29): Shovel probes "G" and "H" were located closer to the house, on the east side of the existing concrete walk just as the walk left the carriage entrance. Portions of the "historic" sidewalk were found in both probes. In shovel probe "H" (closer to the house), Perry states that the "earlier path" curved more sharply to the west.

20. (Page 30): Negative results from shovel probe "I."

21. (Page 30): In shovel probe "J-K" a brick walk (not herringbone) was found directly beneath the concrete sidewalk.

22. (Page 30): Shovel probe "L" disclosed brick fragments. (This is the same area Paul Kiel discovered historic brick paving.)

23. (Page 30-31): No evidence of a brick walk found in shovel probes "O" and "P."

24. (Page 31): Paving brick found in excavation unit 6 was not considered historic (not herringbone patterned), however, the brick was laid in a sand bed. In the south profile, the brick were laid in a "cement" bed.

25. (Pages 31-32): Perry describes findings in archeological

excavation unit (XU) 4 in the vicinity of the north carriage entrance. Her findings revealed vitreous pavers (McManigal) heading upward toward the west. The paving was capped with concrete.

26. (Pages 32-33): Further east, about four feet from the north wall of the house, Perry describes finding two layers of brick beneath a concrete walk. The upper layer was of the McManigal variety, the lower historic. She hypothesizes the historic paving may have been part of the "back piazza."

27. (Pages 33-34): Perry describes finding brick inside the basement walls.

28. (Pages 34-35): Summary of Perry's findings in the north yard: 1) Possible remnants of a retaining wall; 2) A turn-of-the-century brick walk; and, 3) An apparent 20th century patio.

29. (Page 35): Recapitulation of Perry's findings at the north yard and within the basement.

30. (Pages 35-37): Perry's summary of brick types: 1) Medium to dark orange "common" brick--assumed to be historic; 2) Vitrified medium to dark red--assumed non-historic; and, 3) Vitrified "McManigal" pavers similar to (2)--assumed non-historic.

31. (Page 38): Perry asserts the brickwork (McManigal) in the north yard is non-historic.

32. (Page 38): What Perry refers to as the "patio" is assumed non-historic.

33. (Page 39): Brickwork found in XU 6 and XU 10 Perry believes belonged to the back piazza.

34. (Pages 39): Crosby's reiteration of Bearss' description of the historic paving around the house (see reference 9).



FIGURE 3.1

Circa 1920

Southeast corner of the Taft home (looking westward along the south side).

Major Charles Ross McCollough, Plate VIII from William Howard Taft National Historic Site: Historic Grounds Report, October 1, 1971. Cincinnati Historical Society.

Of interest in this photograph is the section of brick paving seen in the lower right corner. It is this paving which, according to McCollough, Bauxar, and Perry, formed an extension of the south areaway possibly leading eastward to the privy.



FIGURE 3.2

1974

Detail of brick walk and limestone steps (both non-historic) at southeast corner of Taft home.

William Howard Taft National Historic Site, park archives.
(Photographic reproduction).

During archeological investigations for the 1974 restoration, the concrete walk seen in Figures 3.4 and 3.5 was removed, and the ground beneath the sidewalk (shown wrapping around the tree) was excavated in hopes of finding remains of a brick walk which may have connected steps in this area to the historic piazza. The results were negative.

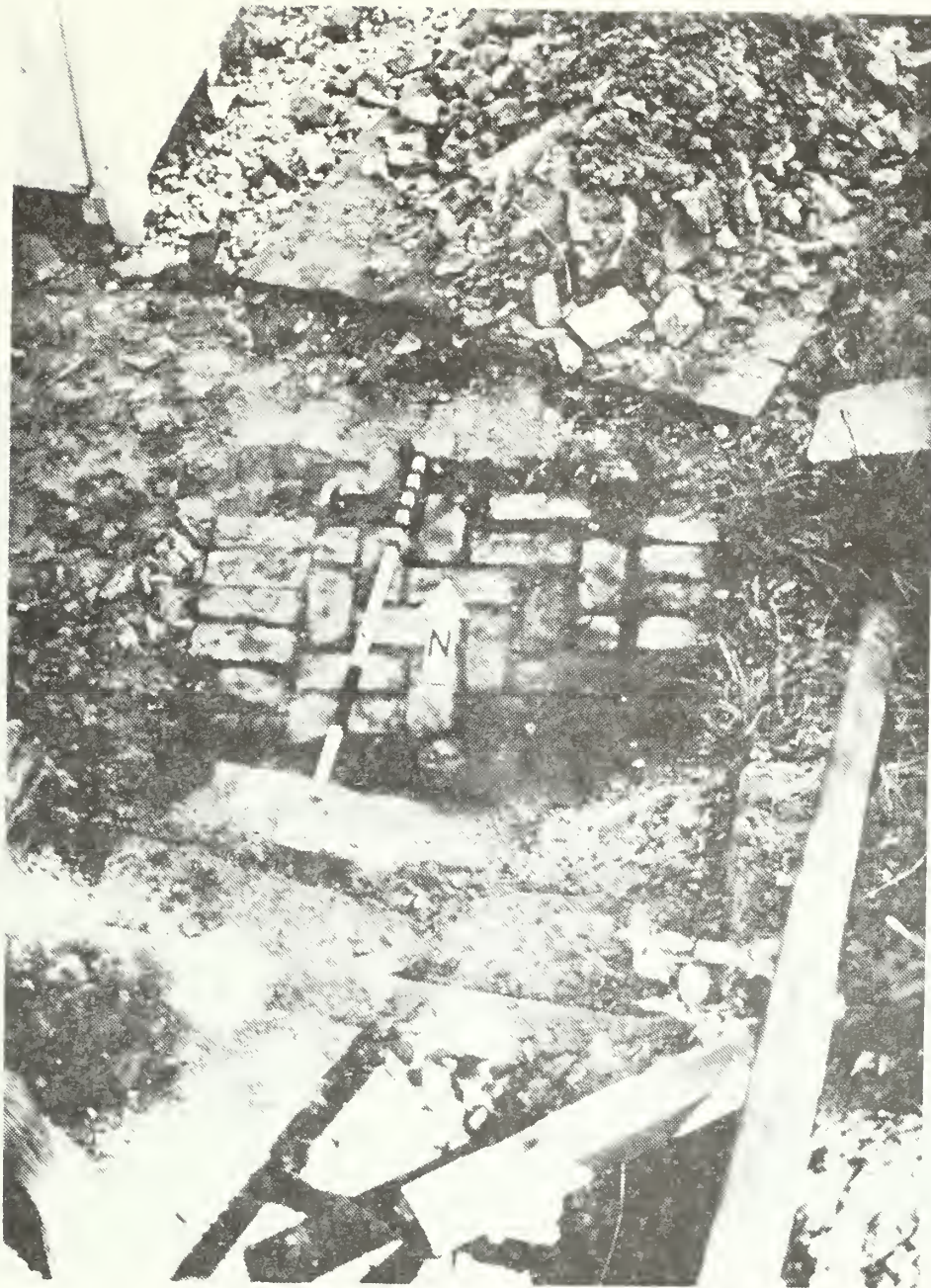


FIGURE 3.3

1974

Non-historic brick walk and stone steps seen in Figure 3.2. Looking north from top of steps.

William Howard Taft National Historic Site, park archives.
(Photographic reproduction).

According to Perry, this section of walkway was non-historic, due to the type of brick used and the pattern (the historic paving had a different edge detail and was set at a diagonal herringbone versus the ninety-degree herringbone pattern seen here). Beneath this paving OhXuxar discovered historic paving (see Figures 3.21 and 3.22).



FIGURE 3.4

Circa 1940

Taft home, south elevation, looking northwest.

William Howard Taft National Historic Site, park archives.
(Photographic reproduction).

This photograph shows the non-historic south porch, and solarium. The concrete sidewalk leading around the south side from the front can be attributed to Elbert R. Bellinger, who owned the home from 1940 to 1960. Two layers of non-historic brick paving were uncovered (see Figures 3.7 and 3.8) when a portion of this walk was taken up during the 1974 restoration.

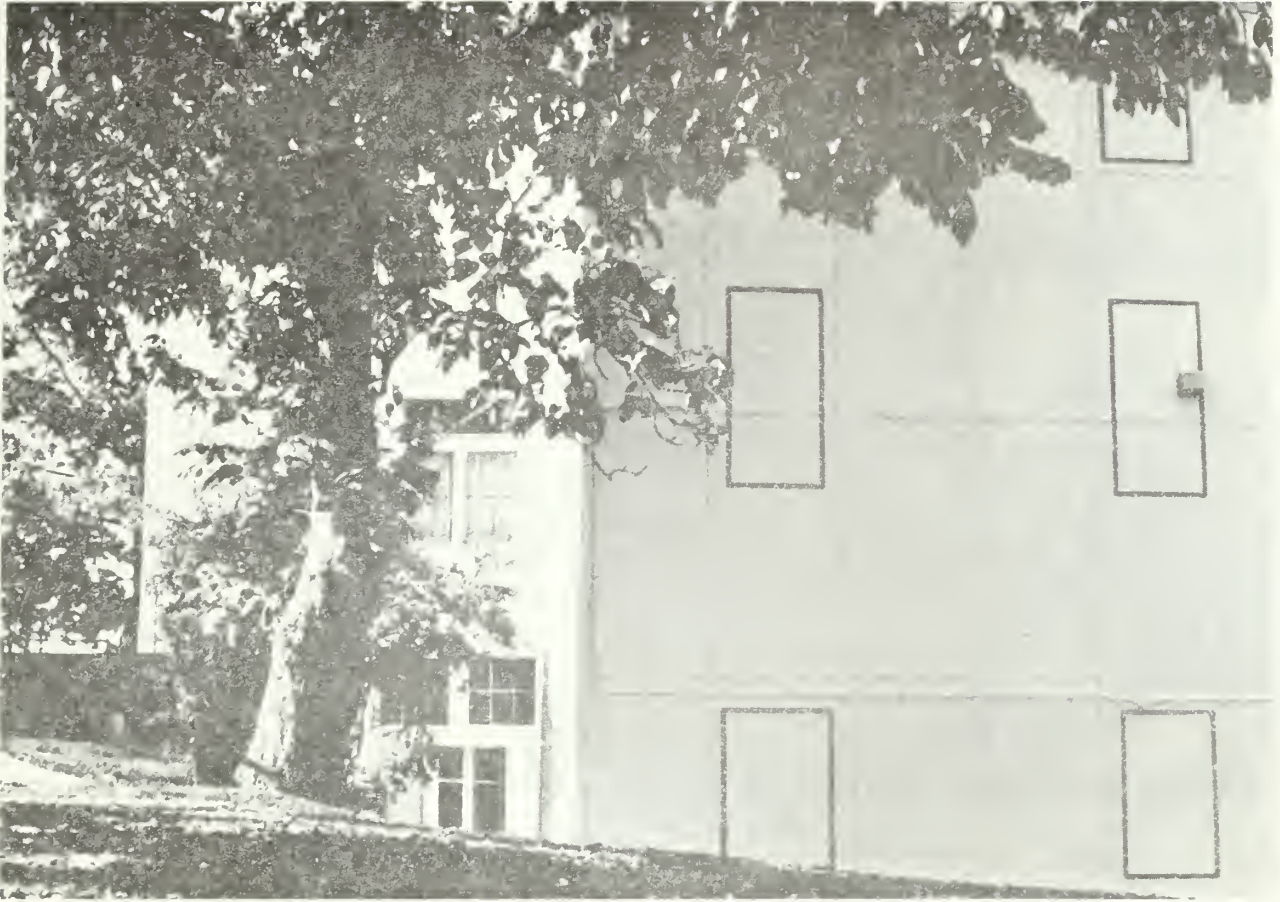


FIGURE 3.5

1974

Taft home, detail of east elevation, looking west.

William Howard Taft National Historic Site, park archives.
(Photographic reproduction).

The concrete walk seen at the very south edge of the Taft home in Figure 3.4 terminated in a set of stairs (the handrail of which can be seen just in front of the tree) which led down to the level of the basement. Both the walk and stairs are attributed to Bellinger and are non-historic.

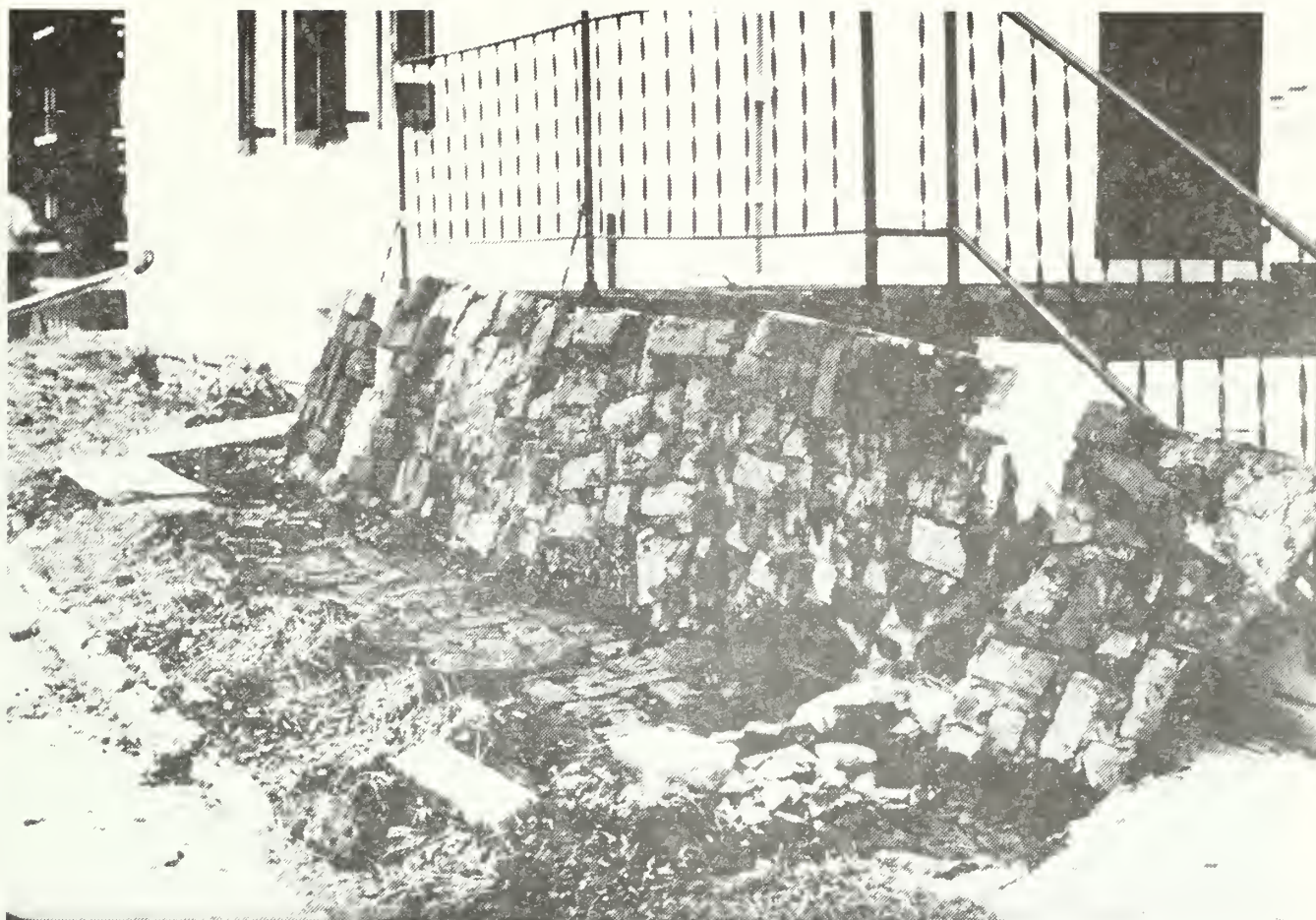


FIGURE 3.7

1974

Taft home, near non-historic south porch: Detail of concrete walk lifted during 1974 restoration revealing non-historic brick paving.

William Howard Taft National Historic Site, park archives.
(Photographic reproduction).

Both layers of brick, according to Perry's analysis, were of a much later (early 1900s) variety than those attributed to the Taft occupation. Historic pavers were not located beneath the two non-historic layers. Also, the historic walk would have been closer to the house (two feet, versus six feet as existed in this photograph).

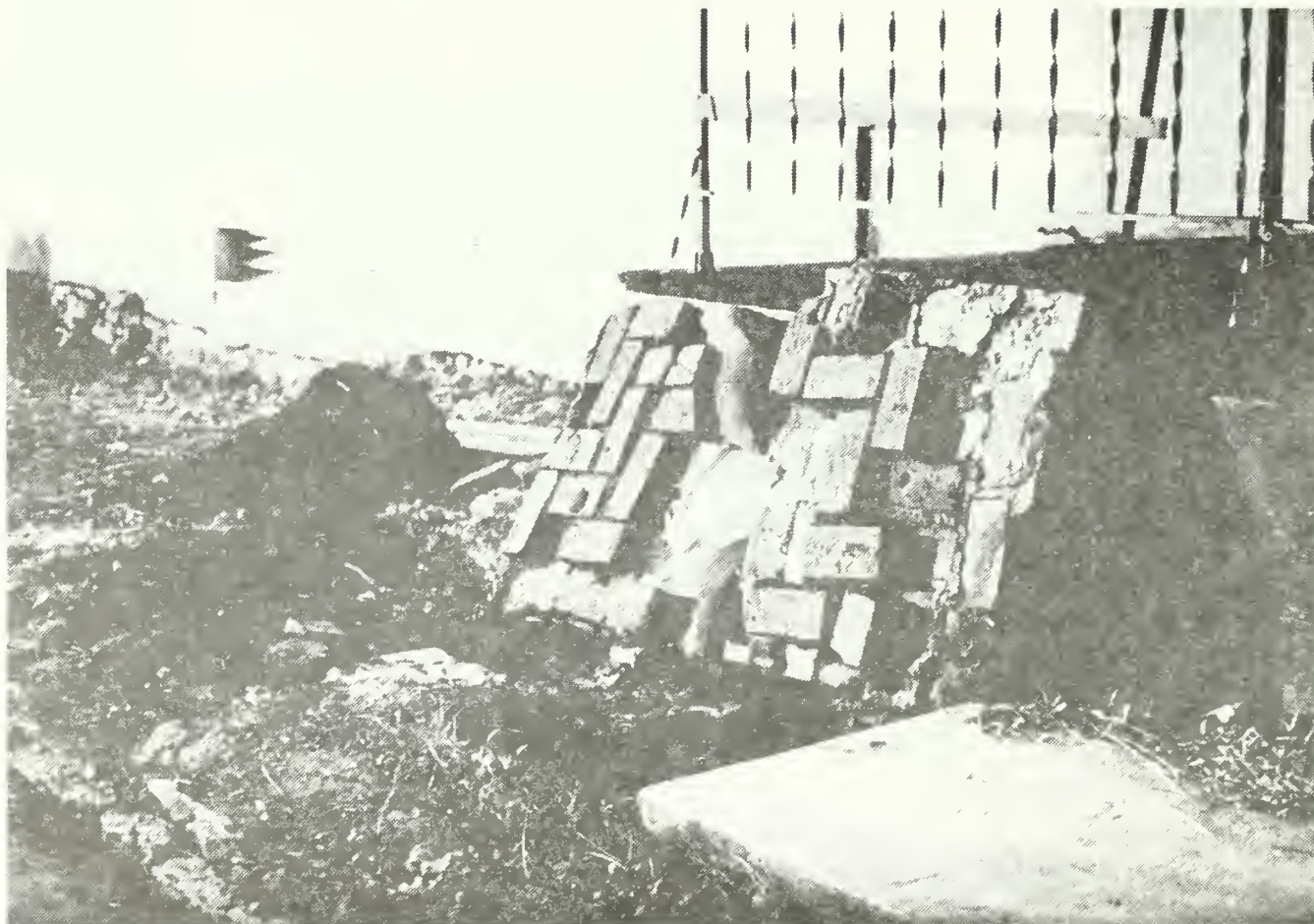


FIGURE 3.8

1974

Detail of Figure 3.7

William Howard Taft National Historic Site, park archives.
(Photographic reproduction).



FIGURE 3.9

Circa 1868

Taft Home (northwest facade)

William Howard Taft National Historic Site, park archives.
(Photographic reproduction of the historic photograph).

Note two brick walks and apparent pattern of brick: front walk leading to main entrance and curvilinear walk leading to the south. The brick pattern is herringbone. There does not appear to be a walk leading to the north, however, because of a change in grade, a walk may exist hidden behind a small berm of grass.



(McCollough 1972)

-57-

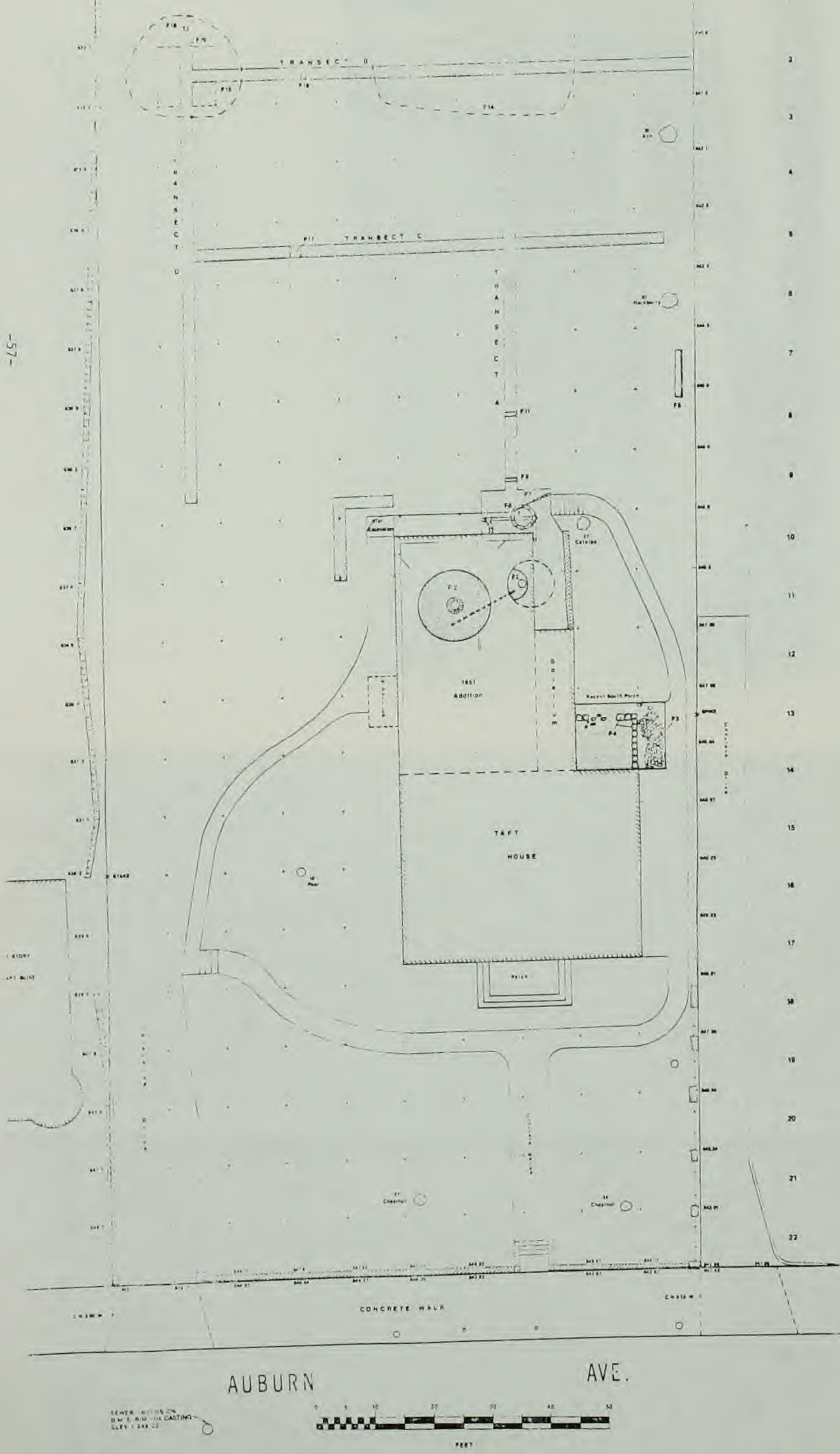


FIGURE 3.10 SITE PLAN OF ARCHEOLOGICAL FEATURES (McCollough 1972)

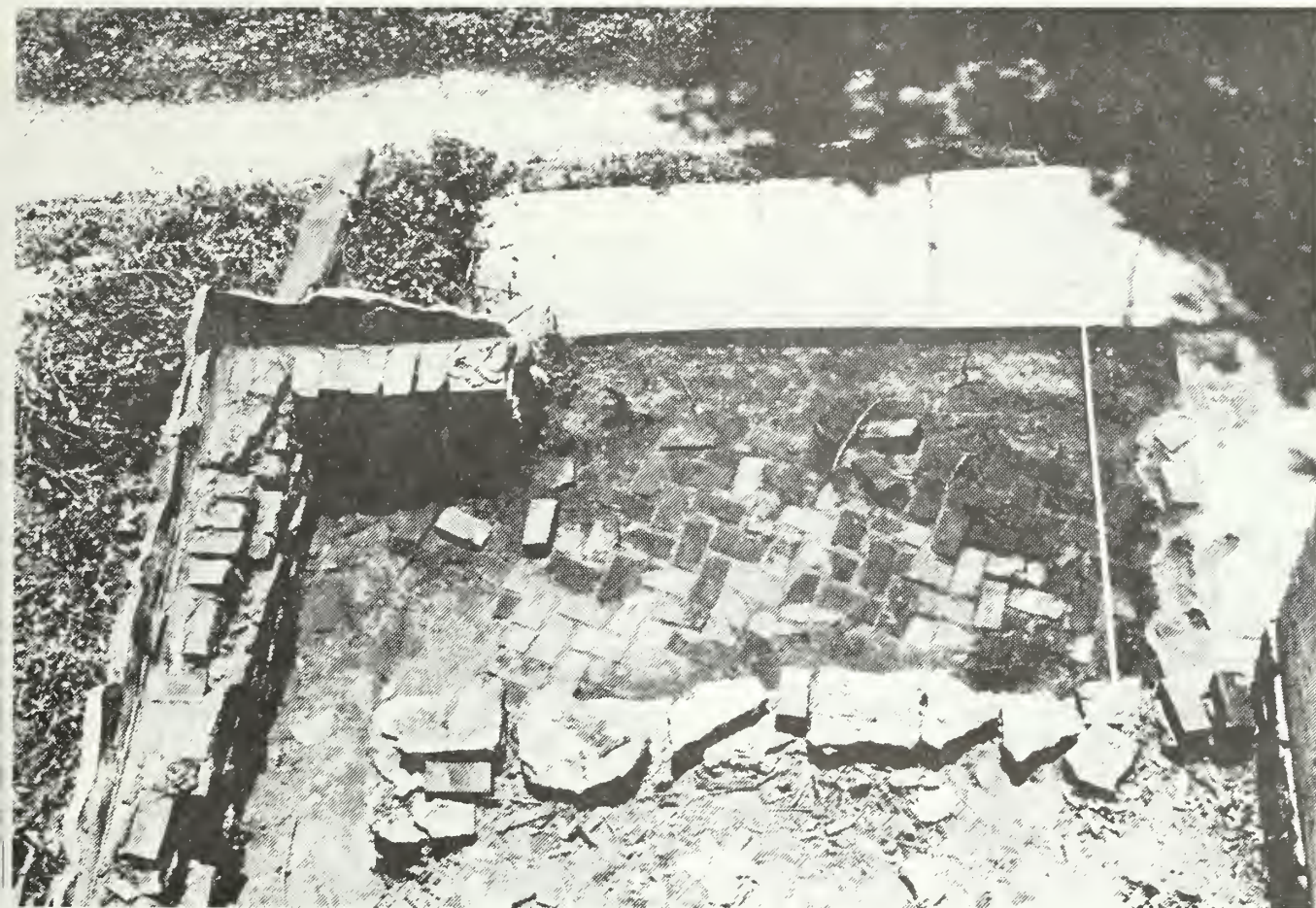


FIGURE 3.11

June 1972

Detail of brick paving uncovered when the south porch was removed during the 1974 restoration.

Major Charles Ross McCollough, Plate VI from Archaeological Investigation of Grounds, June 1, 1972, William Howard Taft National Historic Site, park library.

Note the herringbone pattern in the brick paving. This paving most likely was the continuation of the walk around the south side of the home.

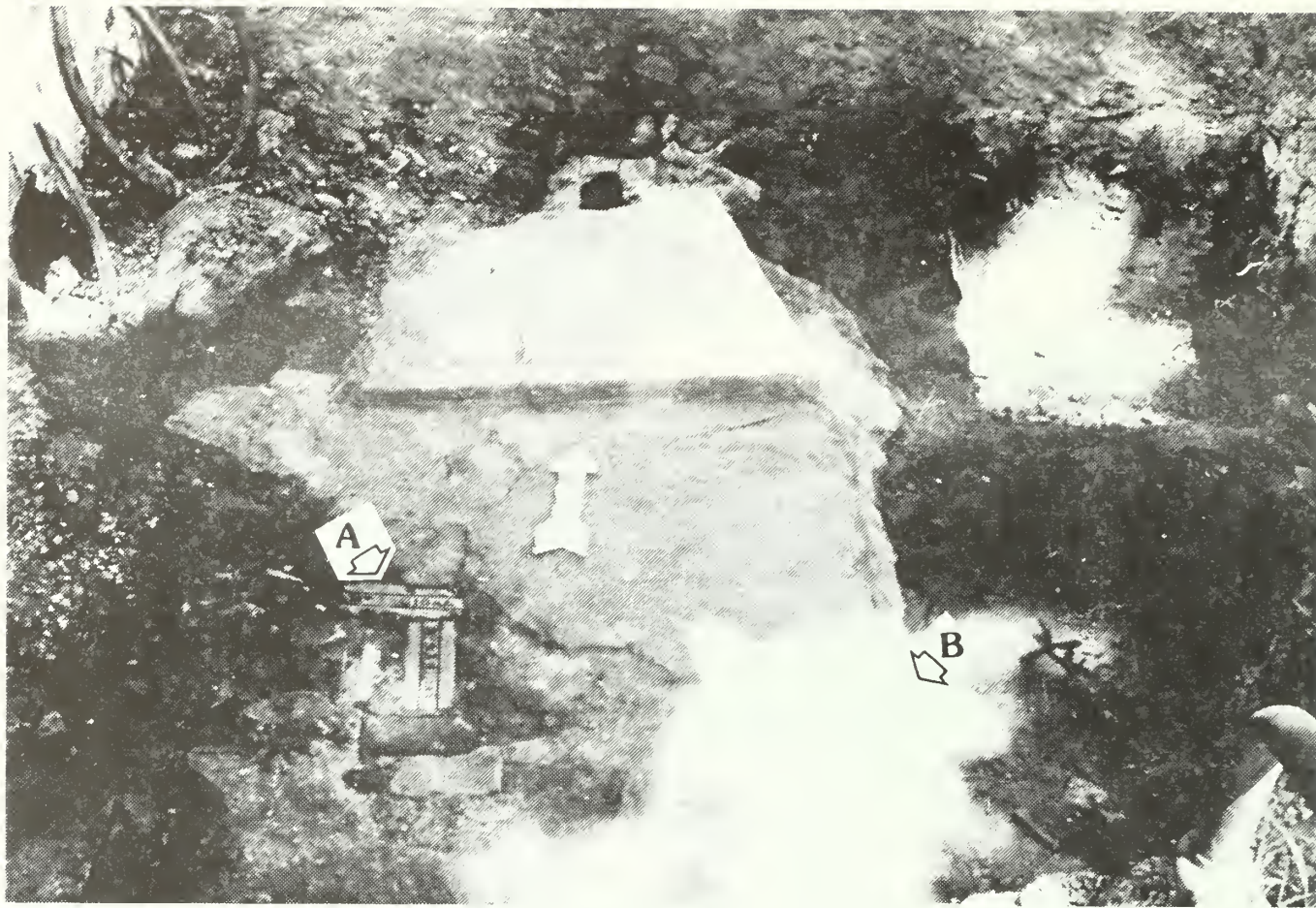


FIGURE 3.12

June 1972

Detail of brick paving edge discovered beneath the concrete walk at the southeast corner of the home.

Major Charles Ross McCollough, Plate XVII from Archaeological Investigation of Grounds, June 1, 1972, William Howard Taft National Historic Site, park library.

A) Non-historic McManigal pavers disclosed directly beneath the concrete walk.

B) McCollough assumed the paving edge pointed out here (which shows up in Figure 3.13) belonged to a continuation of the brick areaway along the south side of the house at basement level. Bauxar's subsequent investigations proved McCollough correct. The type of brick and the pattern match the historic paving discovered elsewhere.

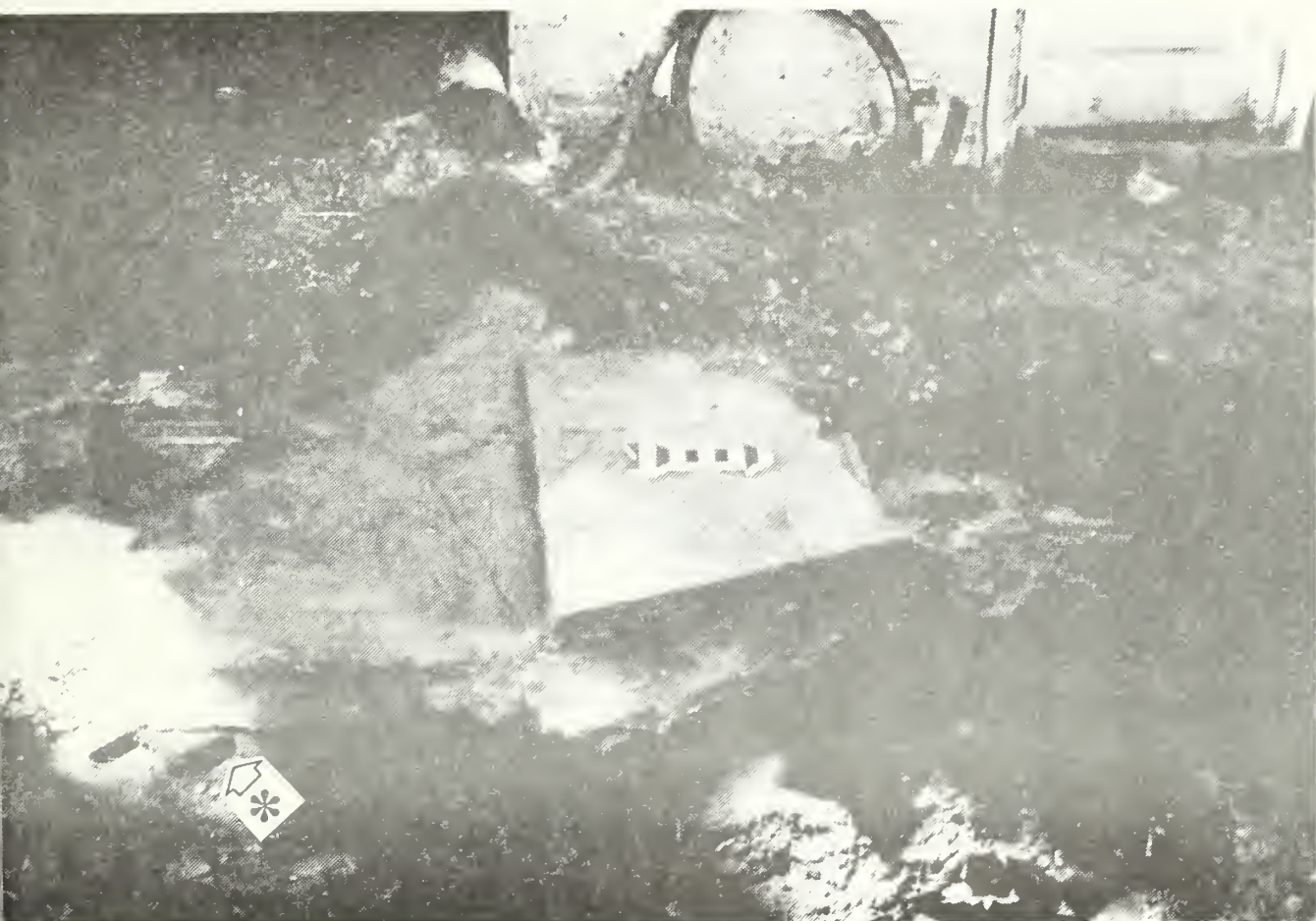


FIGURE 3.13

June 1972

Edge of historic brick paving uncovered during the McCollough investigations. Note historic brick paving beneath concrete walk (at * arrow).

Major Charles Ross McCollough, Plate XVIII from Archaeological Investigation of Grounds, June 1, 1972, William Howard Taft National Historic Site, park library.

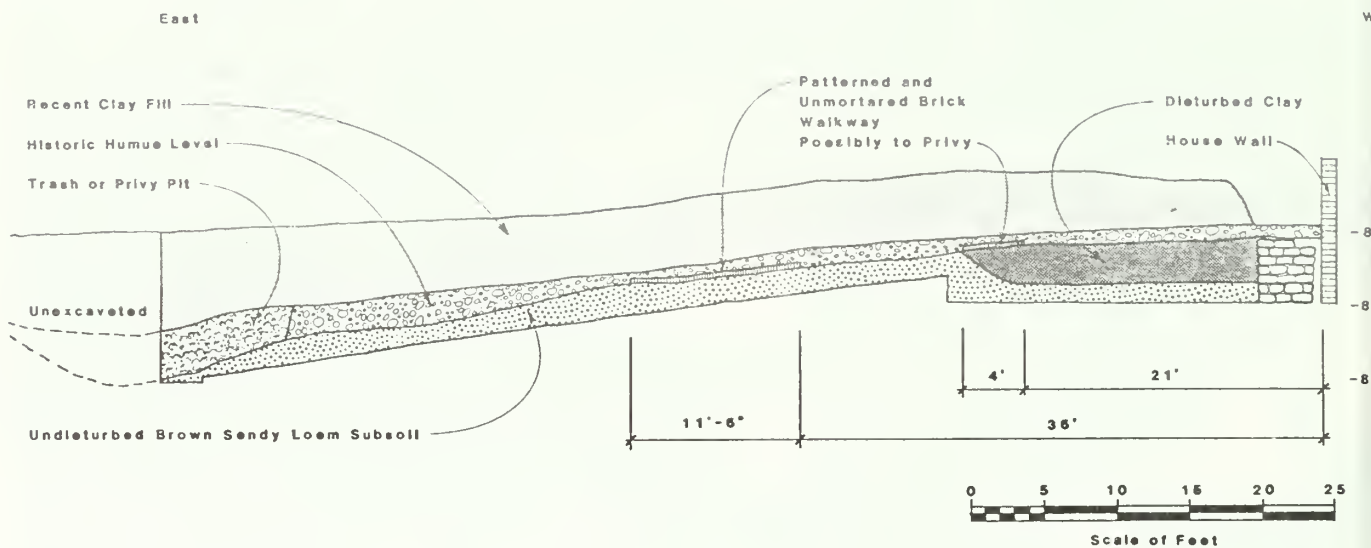


FIGURE 3.14

June 1972

Profile of "Transect A"--redrawn for clarity by Midwest Regional Office Staff.

Major Charles Ross McCollough, detail of Figure 7 from Archaeological Investigation of Grounds, June 1, 1972, William Howard Taft National Historic Site, park library.

Note two sections of historic brick paving which, according to McCollough, belonged to the privy walk.

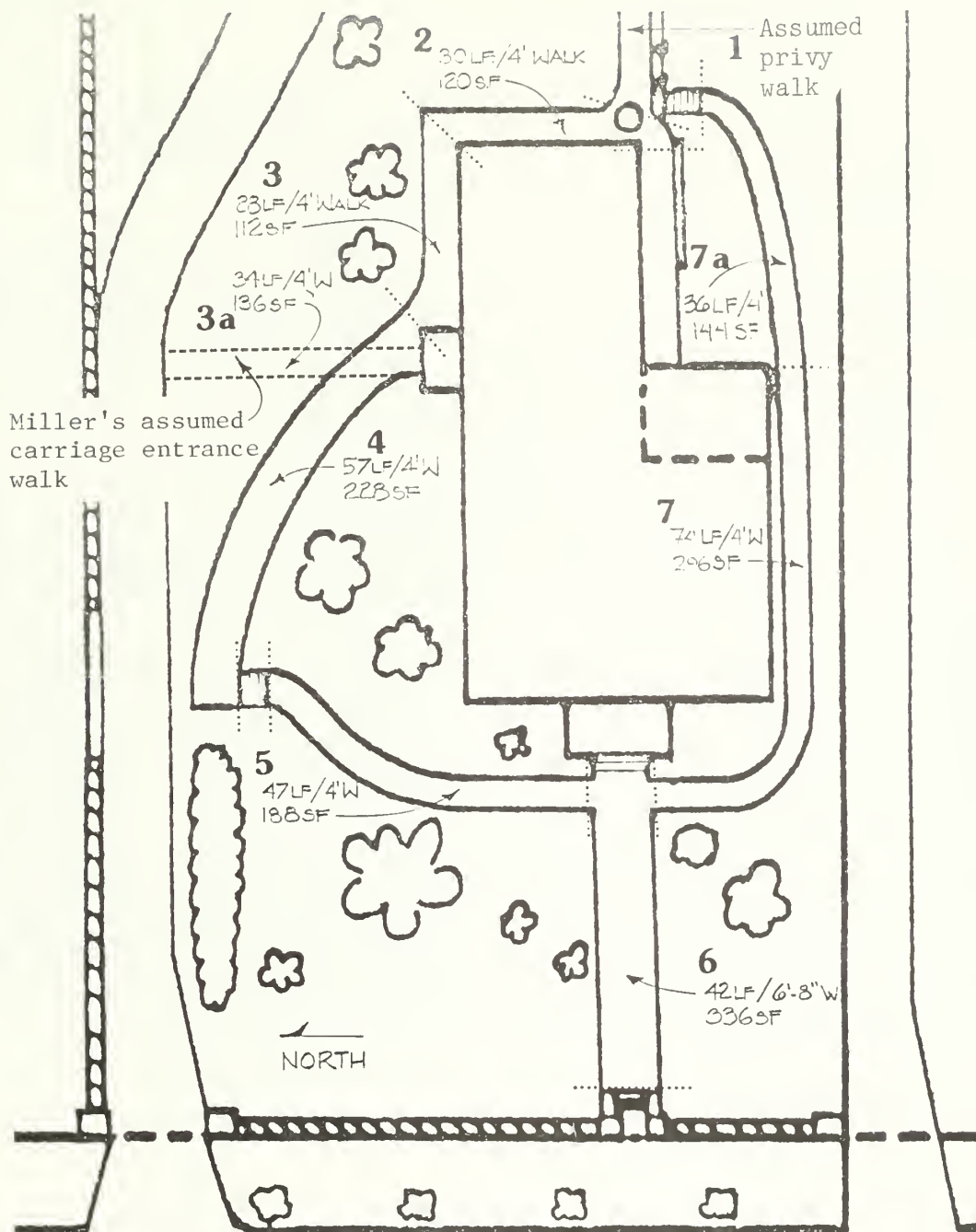
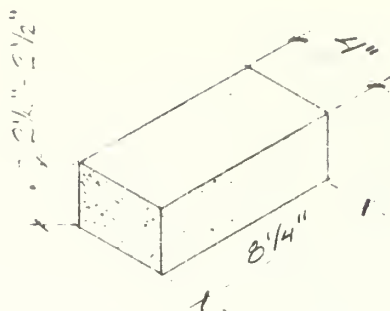


FIGURE 3.15

Detail of historic grounds plan.

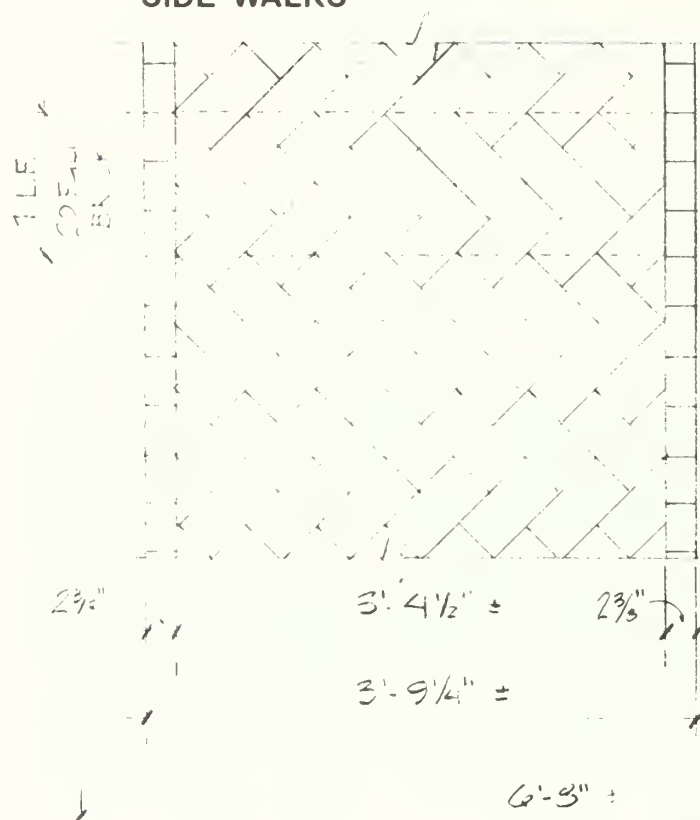
Charles Ross McCollough, detail of Figure 1 from William Howard Taft National Historic Site: Historic Grounds Report, October 1, 1971. National Park Service, Midwest Regional Office.

This detail shows the arrangement of brick walks McCollough assumed existed historically. The calculated areas approximate quantities of brick which may have been purchased by Hunt and Lull to pave walkways in October 1851 (refer to reference 9 on page 20). According to the historical accounts 2,600 brick were purchased at that time. The calculations on Figure 3.16 refute these calculations.



Based on Deborah Bauxar's findings, the size of the historic pavers were as shown at the left.

SIDE WALKS



Using these dimensions, and allowing for minimal joint widths, a layout as shown at the left might have existed. The total width of the walk is approximately 3 feet, 9-1/4 inches.

One lineal foot of walk with the above width would have required approximately 20 brick, and the following walks would have required the accompanying quantities of brick:

#2--East (30 l.f.):	600 ea.
#3--Northeast (28 l.f.):	560 ea.
#4--North (57 l.f.):	1140 ea.
#5--Northwest (47 l.f.):	940 ea.
#7--South (74 l.f.):	1480 ea.
Total:	4720 ea.

The front walk (# 6), which was approximately 6 feet, 8 inches wide, would have required approximately 32-1/4 brick per l.f., or approximately 1355 brick total.

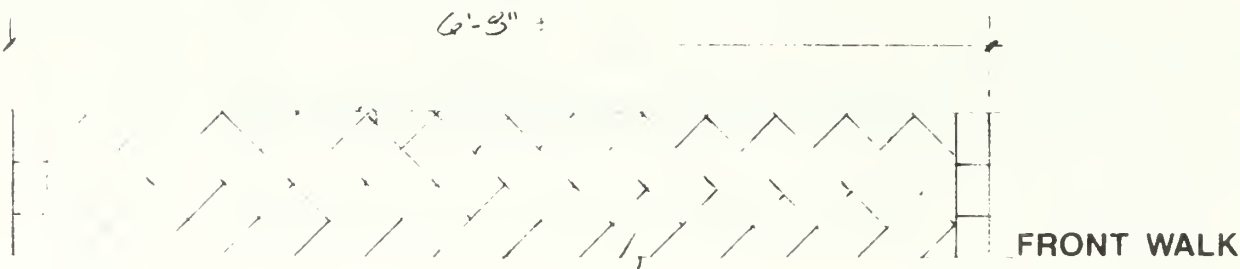


FIGURE 3.16

Brick walkway calculations.

Using the above calculations, it is difficult to imagine how 1300 bricks could have been used to pave "behind and north and south of the house," since, to pave these areas (walks 2, 3, 4, and 7)--according to the above calculations--approximately 3780 brick would have been needed. Also, according to the above, the front walk would have required approximately 1355 brick, which is very close to the quantity listed (1300) which was said to have "finished paving the front walk."

Figure 1. Plan of grounds, historic period (1851-1874). Note: Grounds East of (behind) house totally lack surface indications of historic structures or other features; the rear grounds configuration shown in this figure is an approximation based in historical and archaeological research.

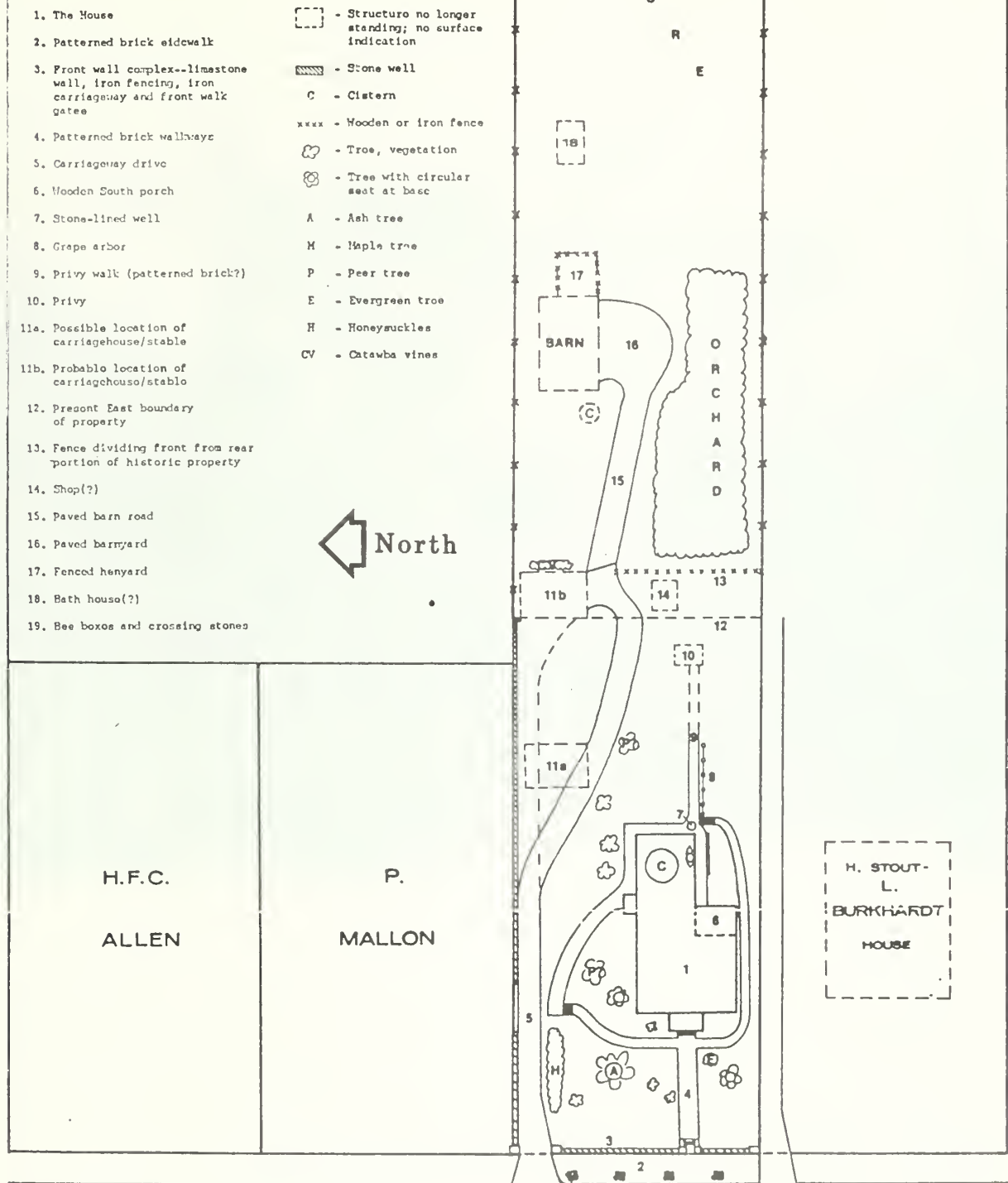


FIGURE 3.17

Plan of grounds, historic period (1851-1874)

Charles Ross McCollough, Figure 1 from William Howard Taft National Historic Site: Historic Grounds Report, October 1, 1971. National Park Service, Midwest Regional Office.



FIGURE 3.18

Circa 1868

Burkhart home (southwest facade)

William Howard Taft National Historic Site, park archives

Note the brick walks leading to the front of the home and around to both the north and south sides of the home. Assuming it was common practice to take a brick walk around both sides of a residence as is the case with the Burkhart home here, we might conclude that a similar arrangement existed at the Taft home, although the sites are different.



FIGURE 3.19

March 1987

Taft Home (northwest facade)

Mark A. Chavez, National Park Service, Midwest Regional Office

This contemporary photograph was taken to approximate the vantage point of the historic photograph shown in Figure 3.9. Of primary interest is the fact that the modern concrete sidewalk leading to the north can just barely be seen. This might indicate that a similar condition existed historically: A brick walk led north from the main entrance walk, but was hidden behind a small berm of earth and grass.

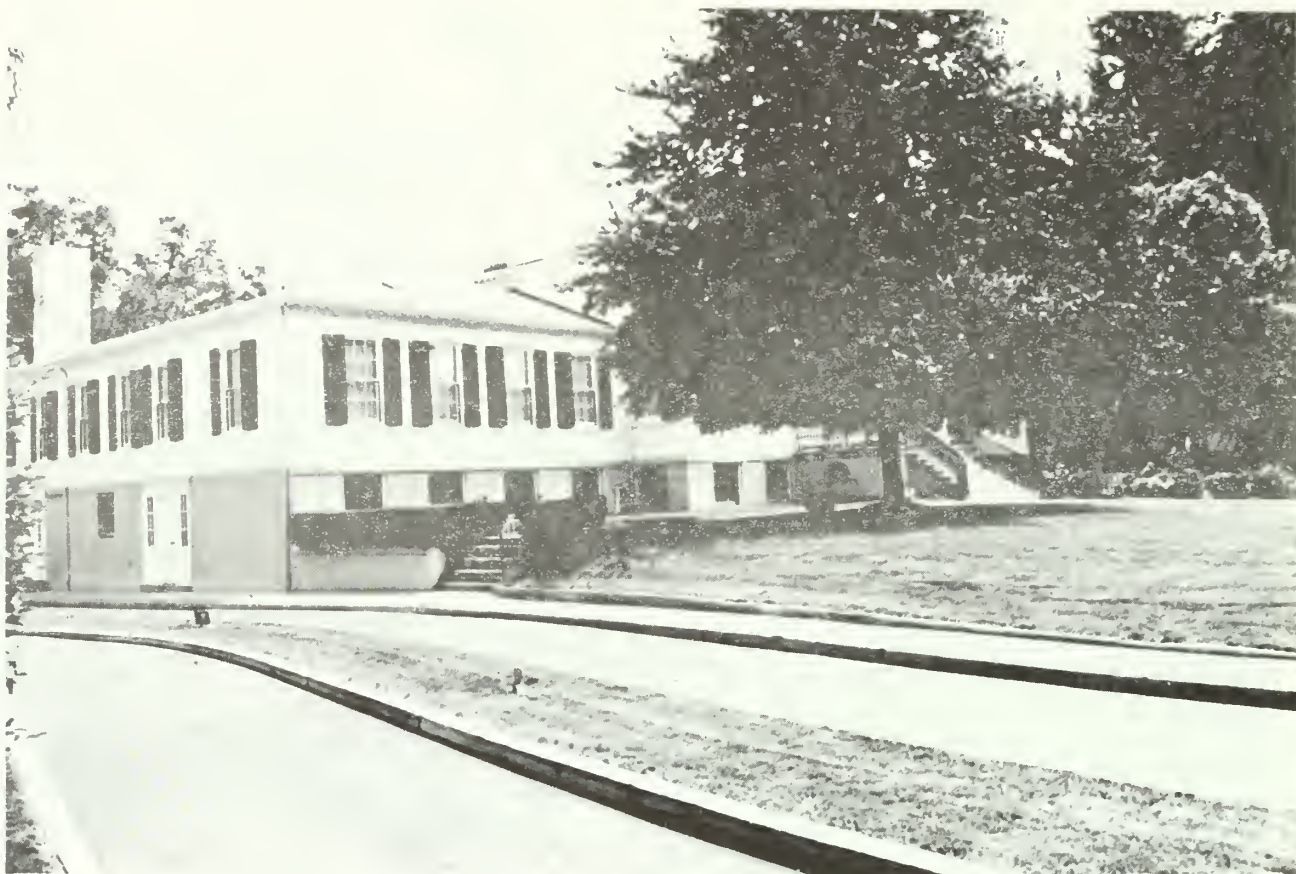


FIGURE 3.20

June 1987

Taft Museum (northwest facade), Cincinnati (former home of Charles P. Taft)

Mark A. Chavez, National Park Service, Midwest Regional Office

This photograph was taken to compare possible carriage entrances in support of William Miller's assertion that a similar condition existed at both this site and the William Howard Taft National Historic Site property. The conclusion is that the sites are indeed different, and the entrance viewed in this photograph is a modern addition.



FIGURE 3.21

1974

Detail of brick paving at the southeast corner which was uncovered when concrete walks in this area were removed during the 1974 restoration.

Deborah K. Bauxar, Plate I from William Howard Taft National Historic Site, Archaeological Investigation of Foundation and Cistern, December 1975, National Park Service, Denver Service Center, Technical Information Center.

A) Another view of the paving seen in Figure 3.3.

B) Beneath the paving shown at "A" was a layer of historic paving, similar to the section which is seen about six feet north of the east door. Note that there would have been at least one step down from this door to the walkway. Figure 3.22 is a detail of this area.



FIGURE 3.22

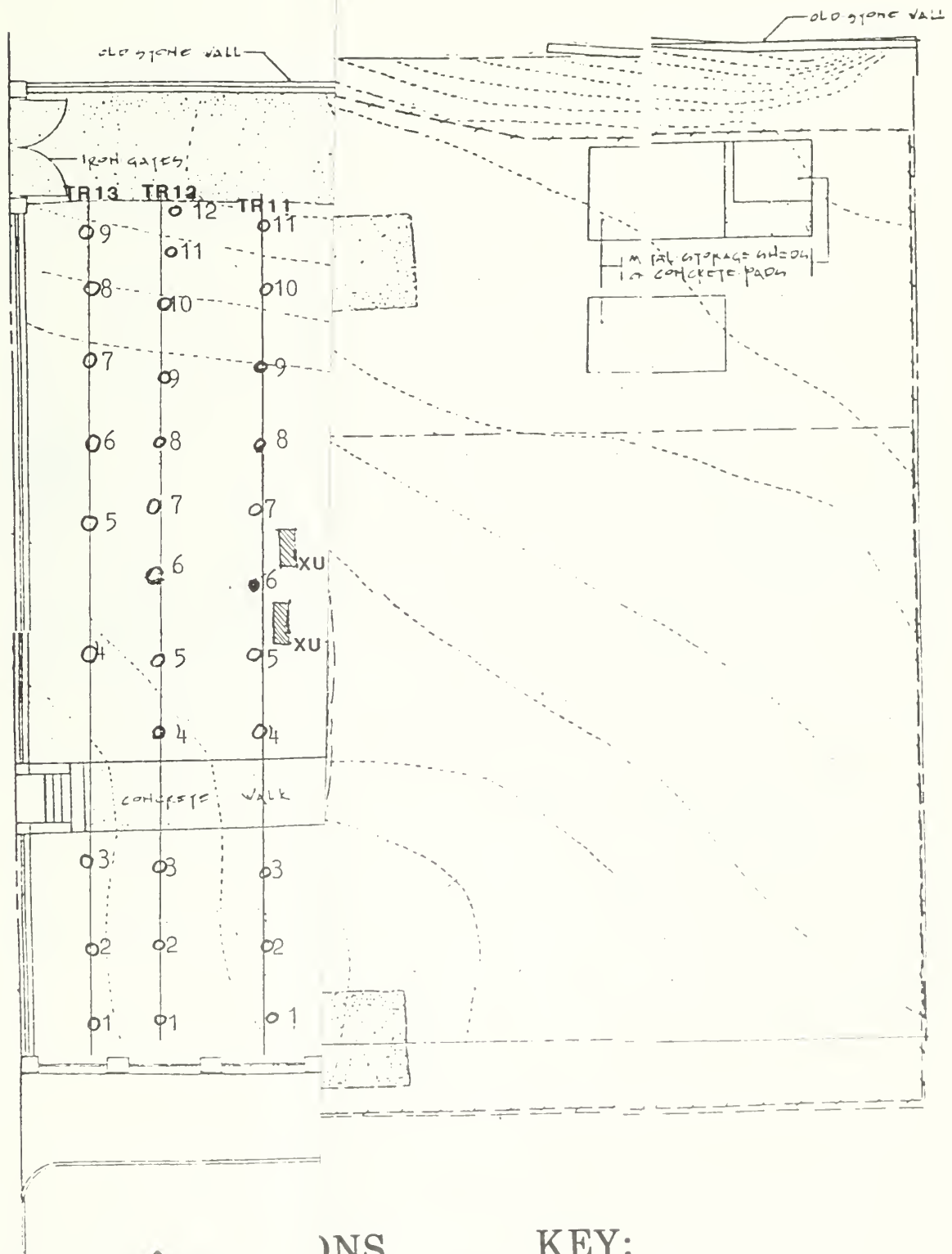
1974

Detail of historic brick paving along the east wall of the house.

Deborah K. Bauxar, Plate II from William Howard Taft National Historic Site, Archaeological Investigation of Foundation and Cistern, December 1975, National Park Service, Denver Service Center, Technical Information Center.

Concrete walks in this area, when removed, revealed a layer of vitreous brick pavers beneath. Under these pavers was a layer of paving similar to what is seen in this photograph. The brick type matches Perry's analysis of historic paving, as does the method of construction (dry-laid in sand) and the pattern (diagonal herringbone).

Auburn Avenue

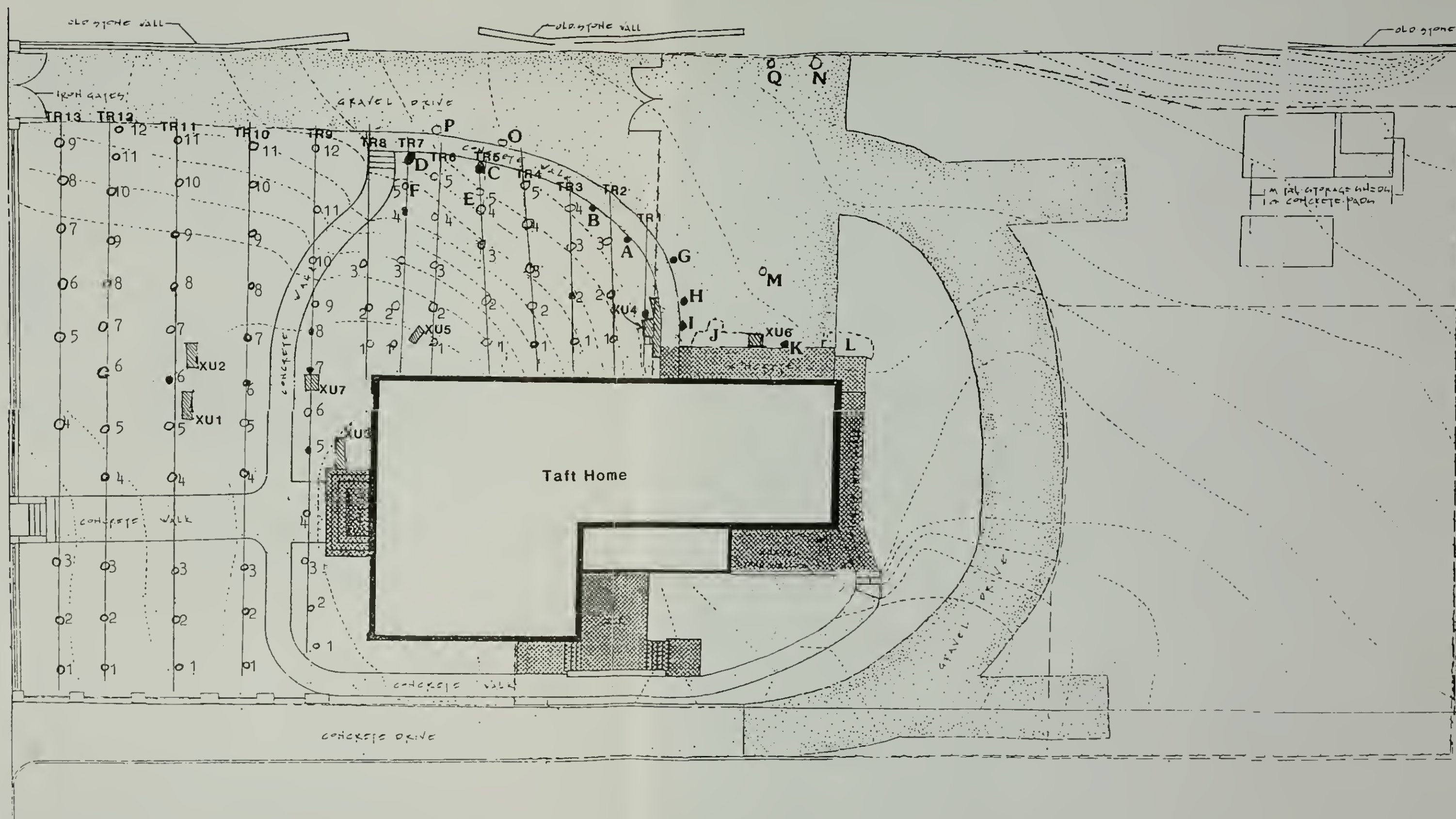


NORTH

ONS

KEY:

- TR3: Transect No.
- 4: Shovel Test No.
- A: Shovel Probe No.
- XU2: Excavation Unit No.



NORTH

SITE PLAN: PERRY 1982 ARCHEOLOGICAL INVESTIGATIONS

(From 4/27/82 - 5/5/82 Field Notes)

FIGURE 3.23

KEY:

- TR3: Transect No.
- 4: Shovel Test No.
- A: Shovel Probe No.
- XU2: Excavation Unit No.

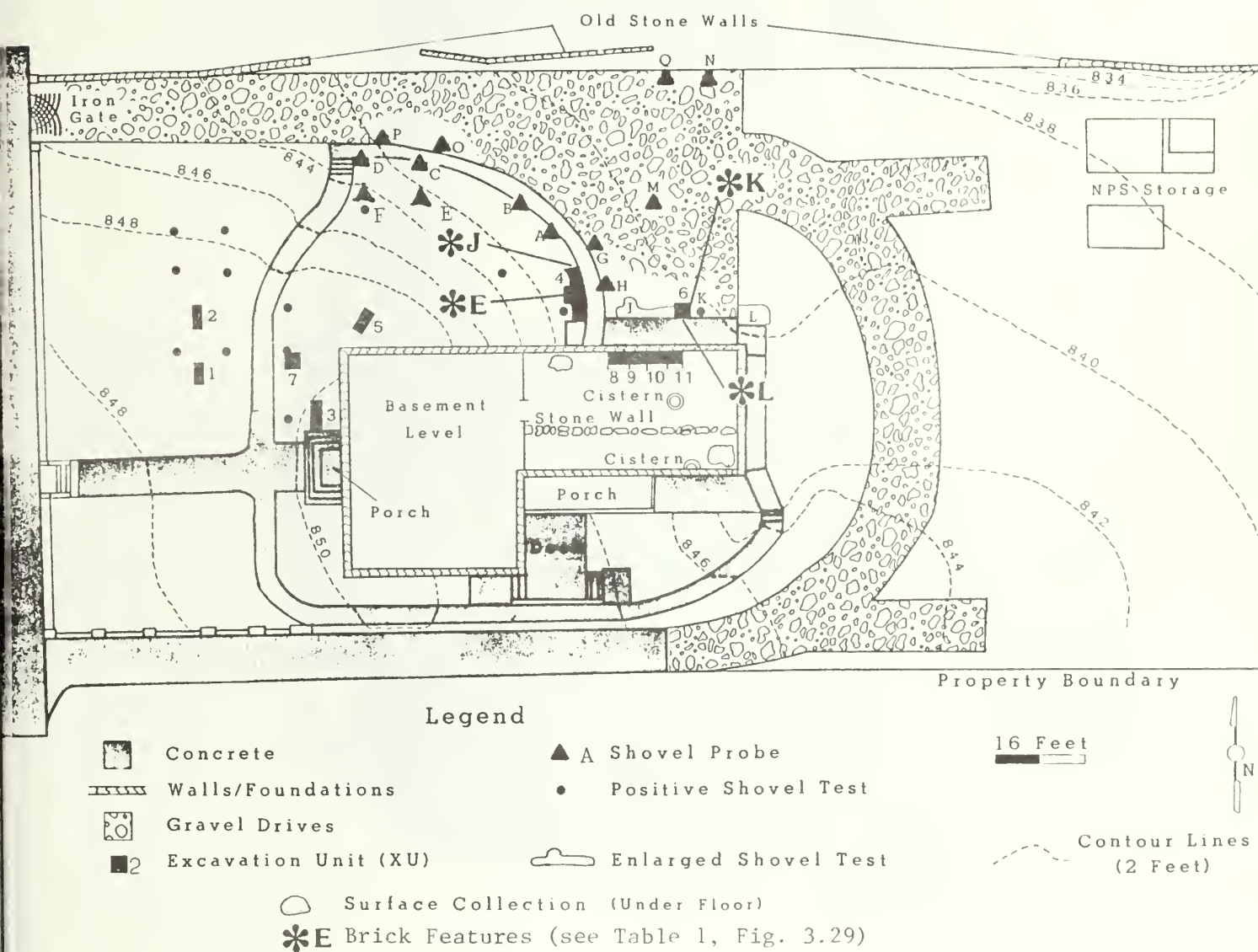


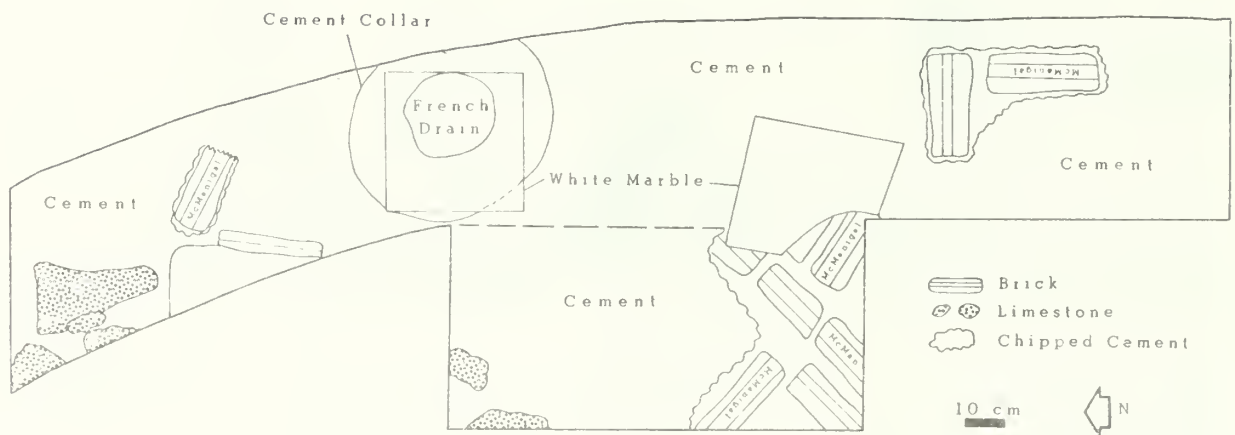
FIGURE 3.24

1982

Site plan of Taft home detailing archeological features.

Leslie A. Perry, Figure 2 (modified) from 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio, June 1983. National Park Service, Midwest Regional Office.

Refer to Figure 3.29 for a list of discovered features.



Plan View of XU4

FIGURE 3.25

1982

Plan view of excavation unit XU4.

Leslie A. Perry, Figure 3 from 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio, June 1983. National Park Service, Midwest Regional Office.

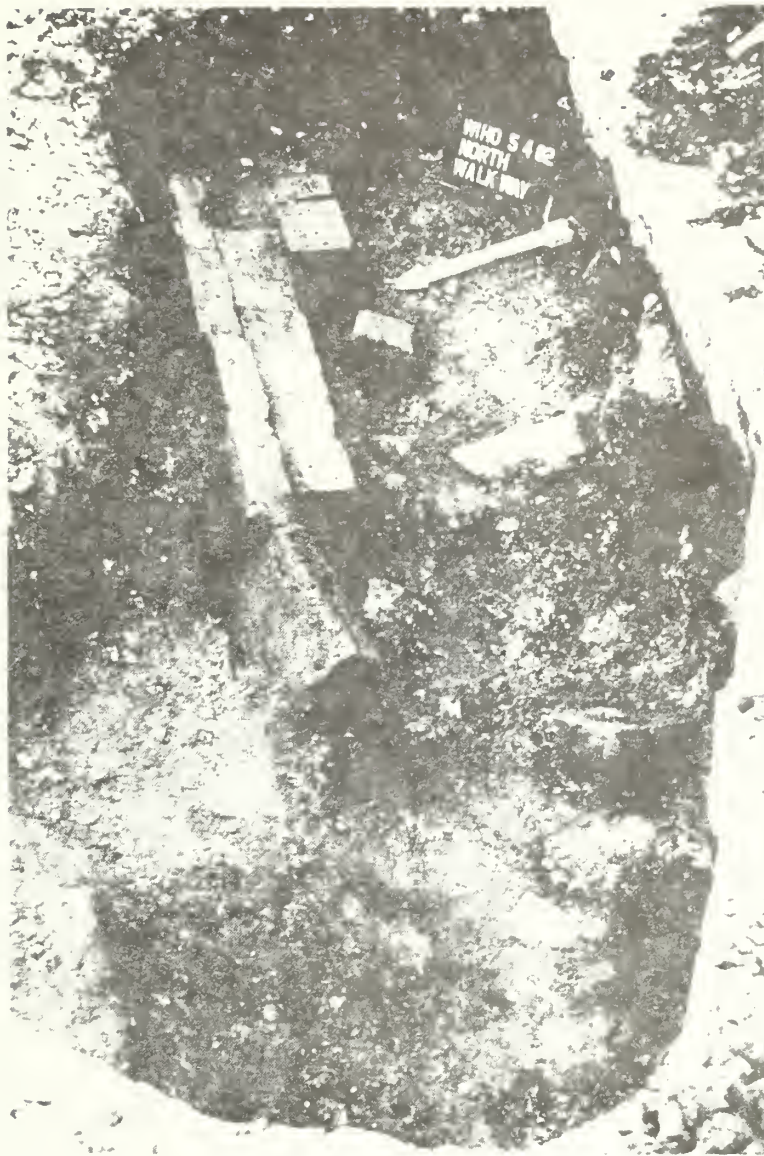


FIGURE 3.26

1982

Brickwork in archeological excavation unit XU 6, at north edge of home.

Leslie A. Perry, Figure 4 from 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio, June 1983. National Park Service, Midwest Regional Office.

This paving, as noted by Perry, was not historic due to the type of pavers "street pavers similar to the MacManigal pavers, set in concrete." Also, the pattern is common bond rather than diagonal herringbone as is the case with the historic paving.

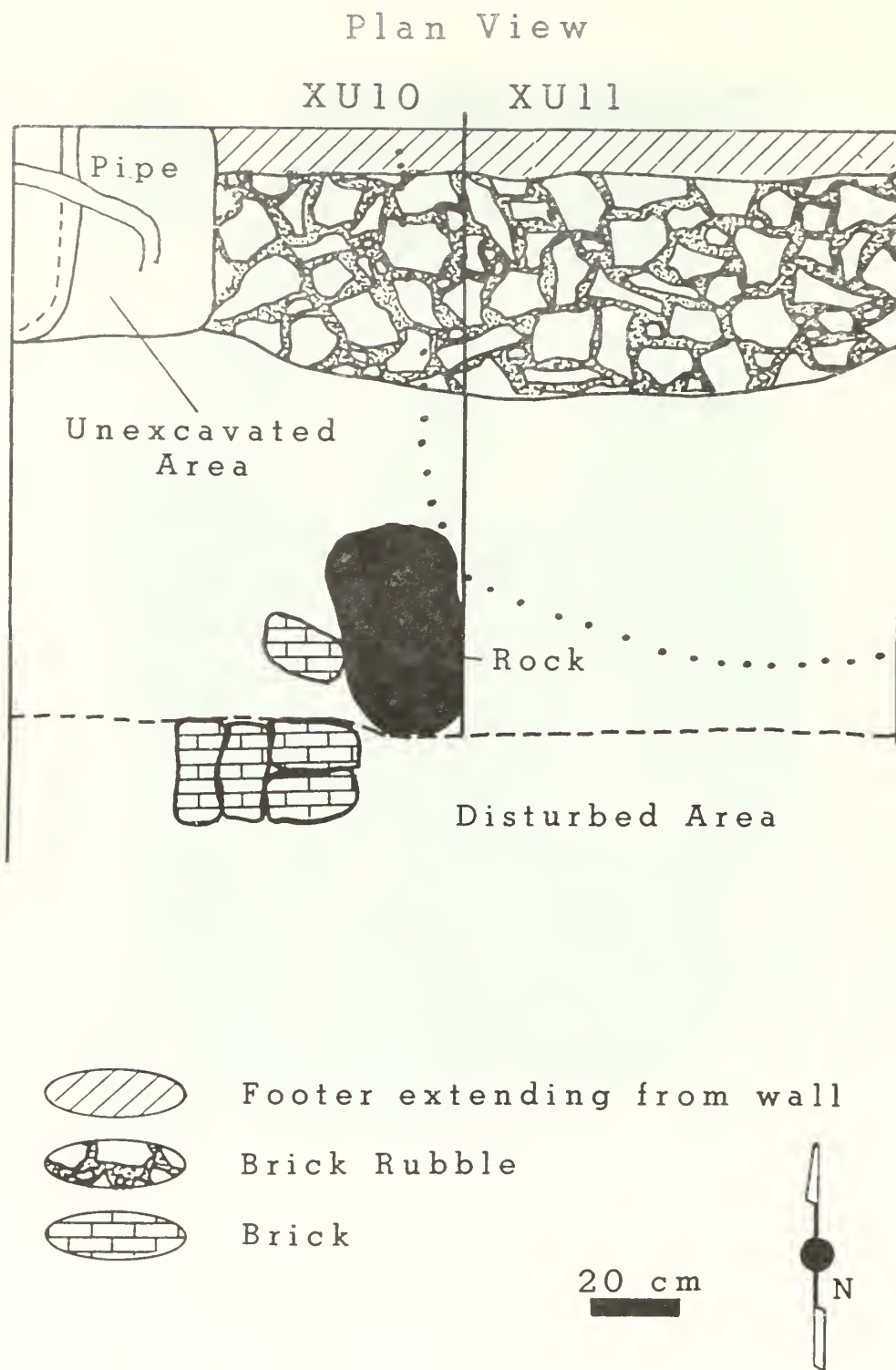


FIGURE 3.27

1982

Plan view of excavation units XU10 and XU11.

Leslie A. Perry, Figure 8 from 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio, June 1983. National Park Service, Midwest Regional Office.

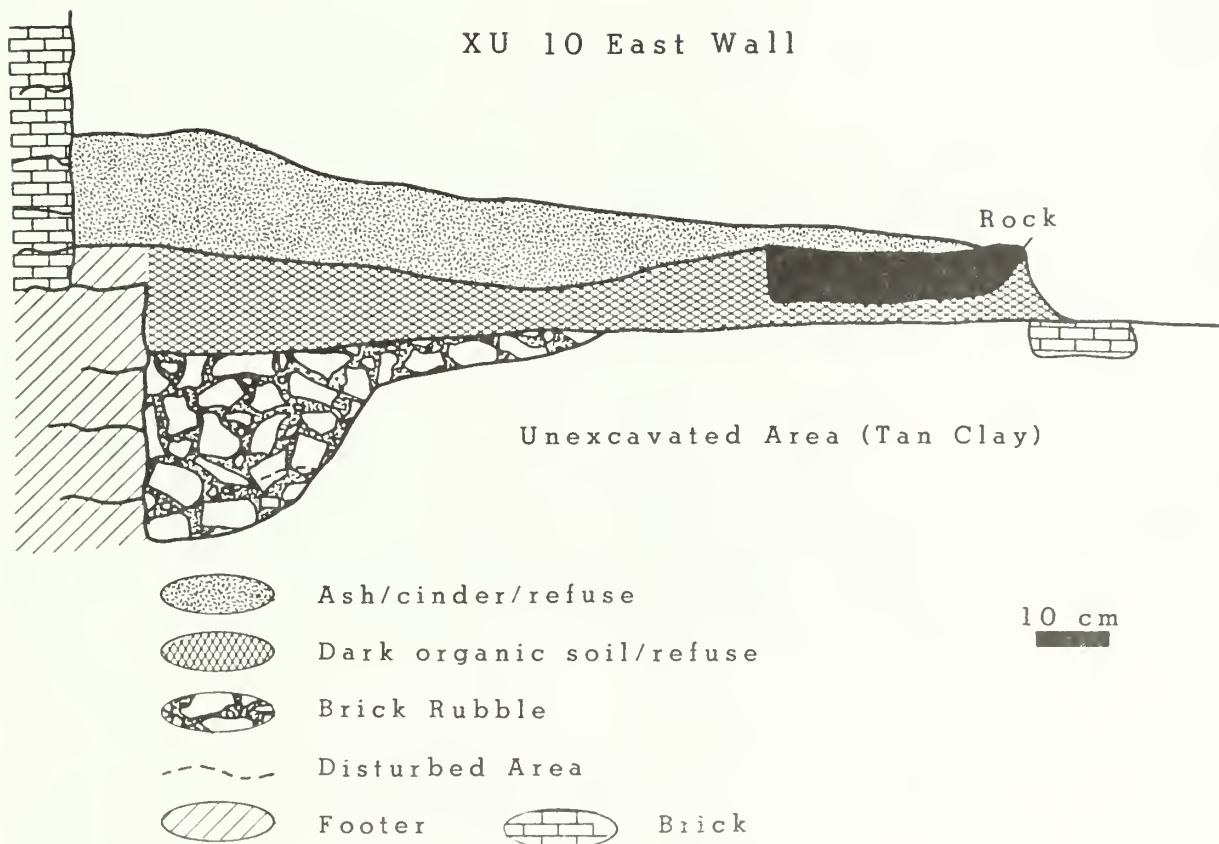


FIGURE 3.28

1982

Profile of excavation unit XU10.

Leslie A. Perry, Figure 7 from 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio, June 1983. National Park Service, Midwest Regional Office.

Table 1. List of defined features, Taft House Site (33HA431), 1982.

Features	Feature Description
A	Disturbed pier from 1900 front porch, XU 3.
B	Northwest pier from 1900 front porch, XU 7.
C	Ceramic pipe, XU 3.
D	Ceramic pipe, XU 5.
E	Rubble wall, XU 4.
* F	MCMANIGAL brickwork, XU 4. [Non-historic]
G	Marble cap on French drain, XU 4.
H	Drain extension, XU 4.
I	French drain, XU 4.
* J	Brick Walk (leading from carriage entrance to front yard of house, extending from XU 4). [McManigal, see reference 25, pg.31]
* K	Brick walk (comparable to Feature J, but located north of the east wing). [McManigal, see reference 28, pg. 34 and reference 30, pg. 35]
* L	19th century brickwork, XU 6. [Note: according to the text, ref. 26, pg. 32, the brick found here was "post-Taft," which would date it to the 20th century].
M	Trash pit, XU 6.
N	Ceramic pipe Shovel Probe J
O	Stone foundation line in interior of basement.
P	Concentration of faunal remains in northwest corner of basement interior.
Q	Cultural bearing zone, XUs 8-11.
R	Builder's trench for north foundation of east wing, XU 8-11.

* Features which disclosed brick.

FIGURE 3.29

1982

List of Defined Features, Taft Home Site

Leslie A. Perry, Table 1 from 1982 Archeological Investigations at the Taft House Site, (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio, June 1983. National Park Service, Midwest Regional Office.



IV. EXISTING CONDITIONS

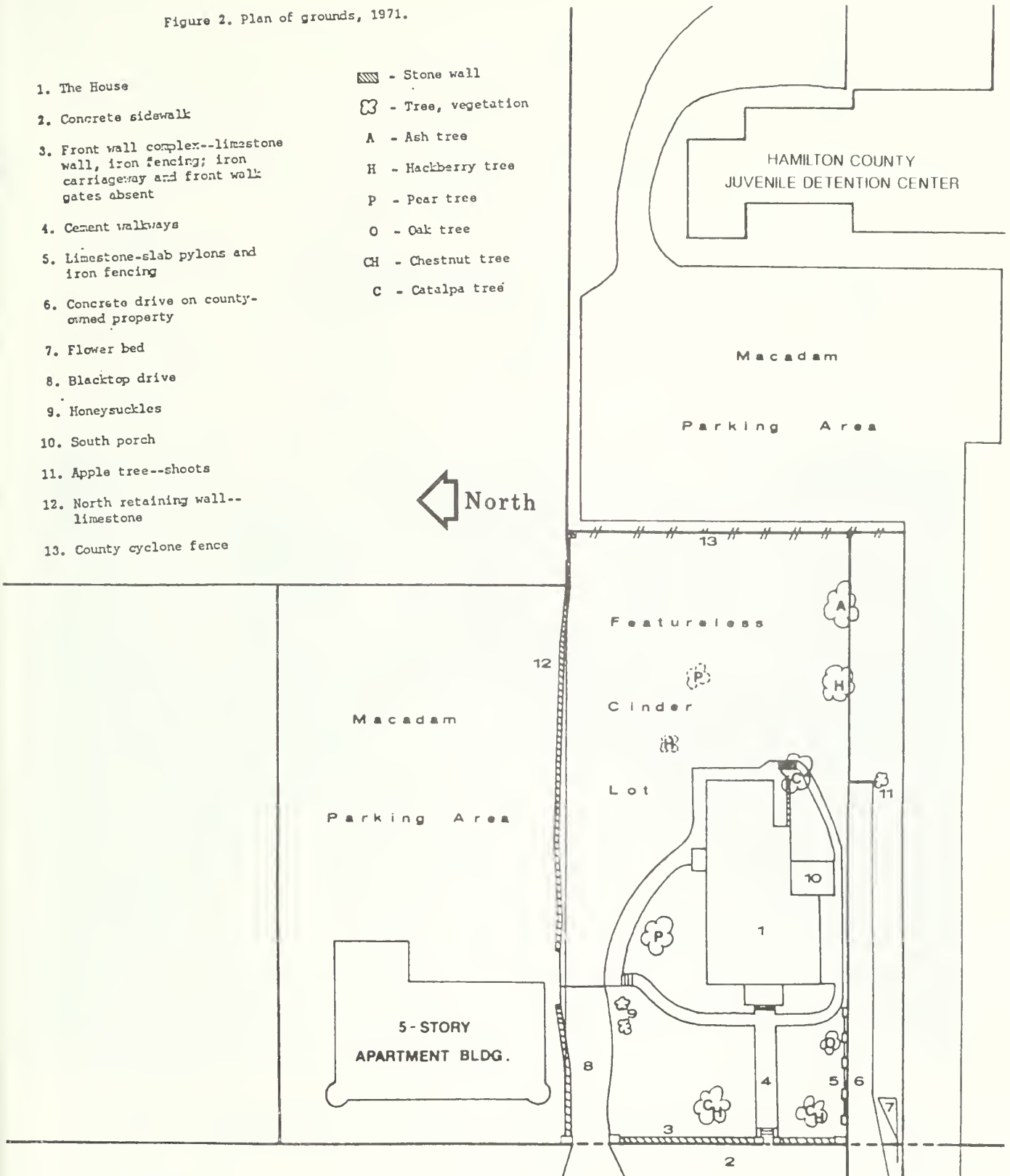
IV. EXISTING CONDITIONS

=====

Figure 4.1, McCollough's site plan of the grounds as he found them in 1971, can be compared to the existing site plan, Figure 4.2 (July 1987). In 1971 all of the walks were concrete. In the restoration project of 1974, the front (west) entry paving was replicated using brick. As well, the south, northeast and east concrete walks were removed. The photographs which follow (Figures 4.3 through 4.24) were taken in June of 1987 and are keyed from Figure 4.2.

1. The House
2. Concrete sidewalk
3. Front wall complex--limestone wall, iron fencing; iron carriage way and front wall gates absent
4. Cement walkways
5. Limestone-slab pylons and iron fencing
6. Concrete drive on county-owned property
7. Flower bed
8. Blacktop drive
9. Honeysuckles
10. South porch
11. Apple tree--shoots
12. North retaining wall--limestone
13. County cyclone fence

-  - Stone wall
 - Tree, vegetation
 A - Ash tree
 H - Hackberry tree
 P - Pear tree
 O - Oak tree
 CH - Chestnut tree
 C - Catalpa tree



Plan of grounds in 1971.

-83-

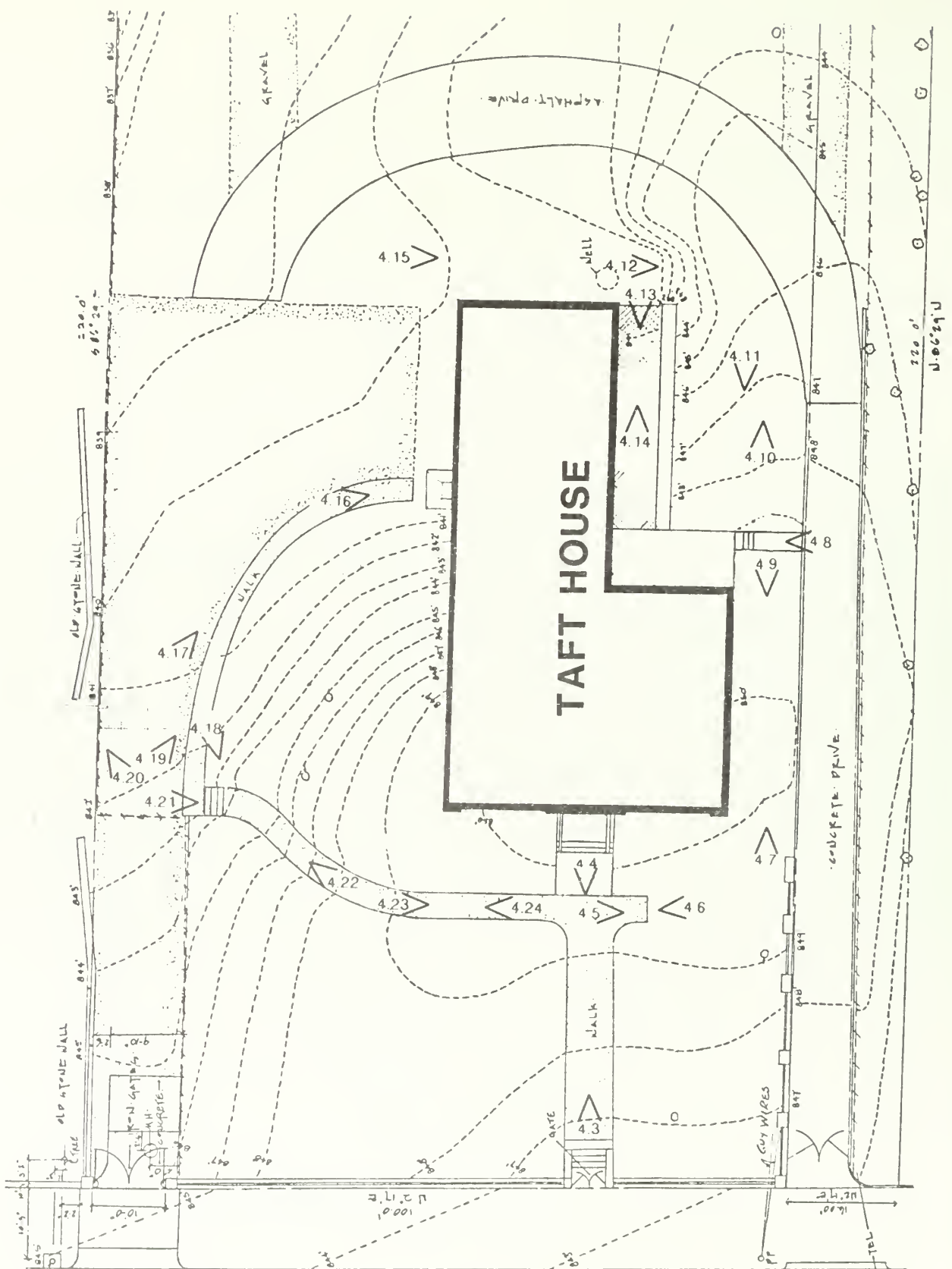


FIGURE 4.2

Existing Conditions Site Plan (1987)

Directional arrows with numbers refer to photographs of the grounds which follow (the number listed refers to the Figure number).



FIGURE 4.3

June 1987

Grounds of Taft Home (looking east from entry gate).

Mark A. Chavez, National Park Service, Midwest Regional Office

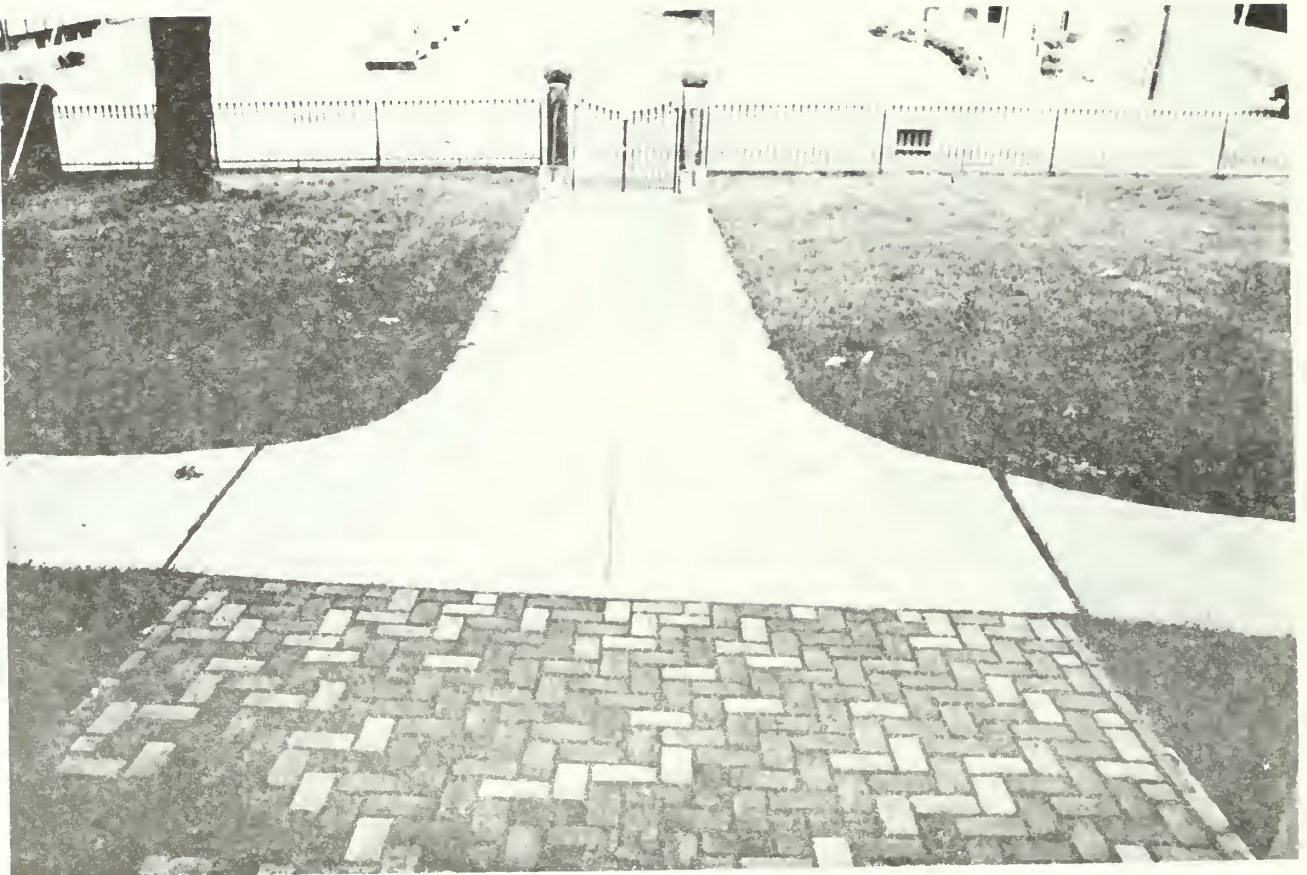


FIGURE 4.4

June 1987

Grounds of Taft Home (looking west from front entry steps).

Mark A. Chavez, National Park Service, Midwest Regional Office

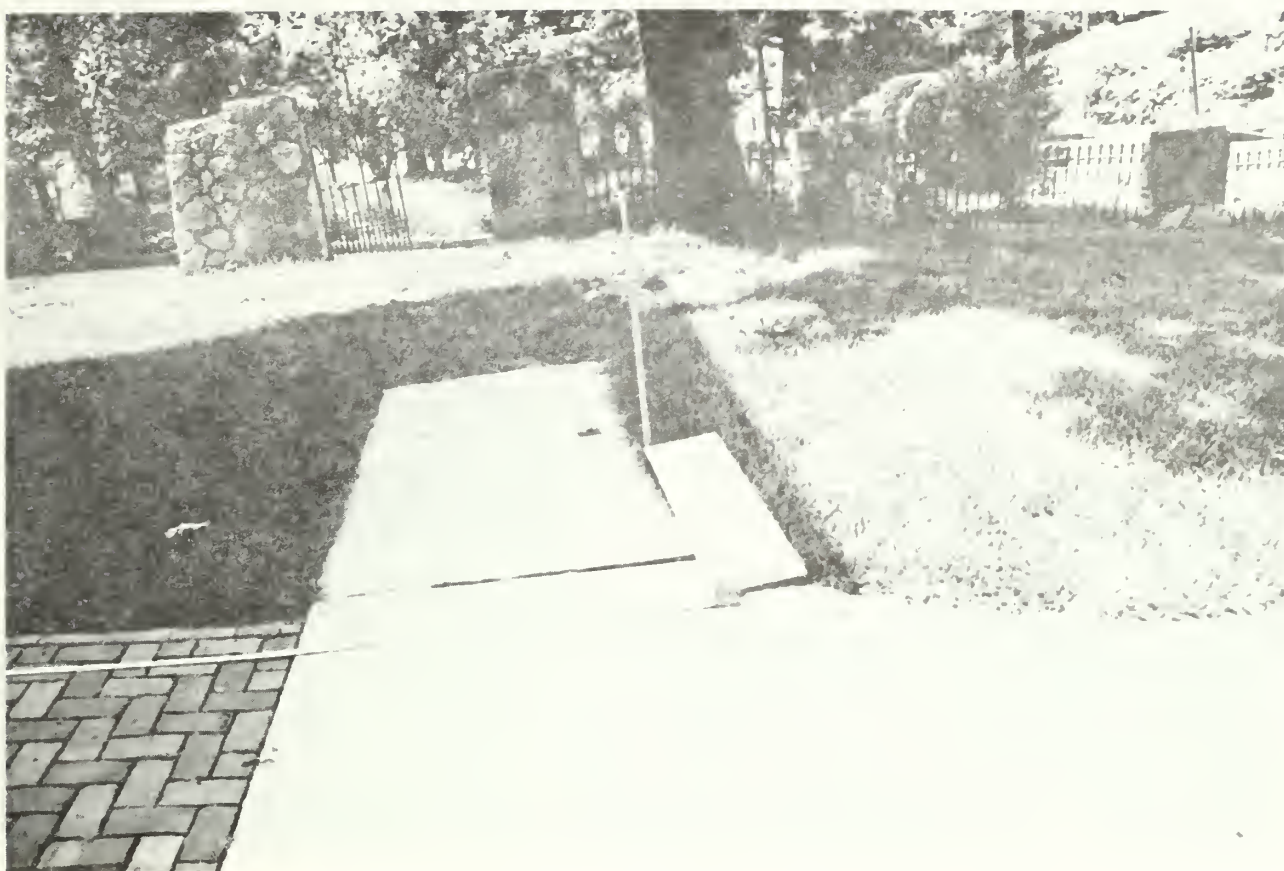


FIGURE 4.5

June 1987

Grounds of Taft Home (looking south from front entry).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.6

June 1987

Grounds of Taft Home (looking north along former concrete walk).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.7

June 1987

Grounds of Taft Home (looking east at southwest corner of home).

Mark A. Chavez, National Park Service, Midwest Regional Office

The historic brick walk was located approximately 2-feet from the south exterior wall of the house.



FIGURE 4.8

June 1987

Grounds of Taft Home (looking north toward reconstructed piazza).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.9

June 1987

Grounds of Taft Home (looking west along south exterior wall).

Mark A. Chavez, National Park Service, Midwest Regional Office

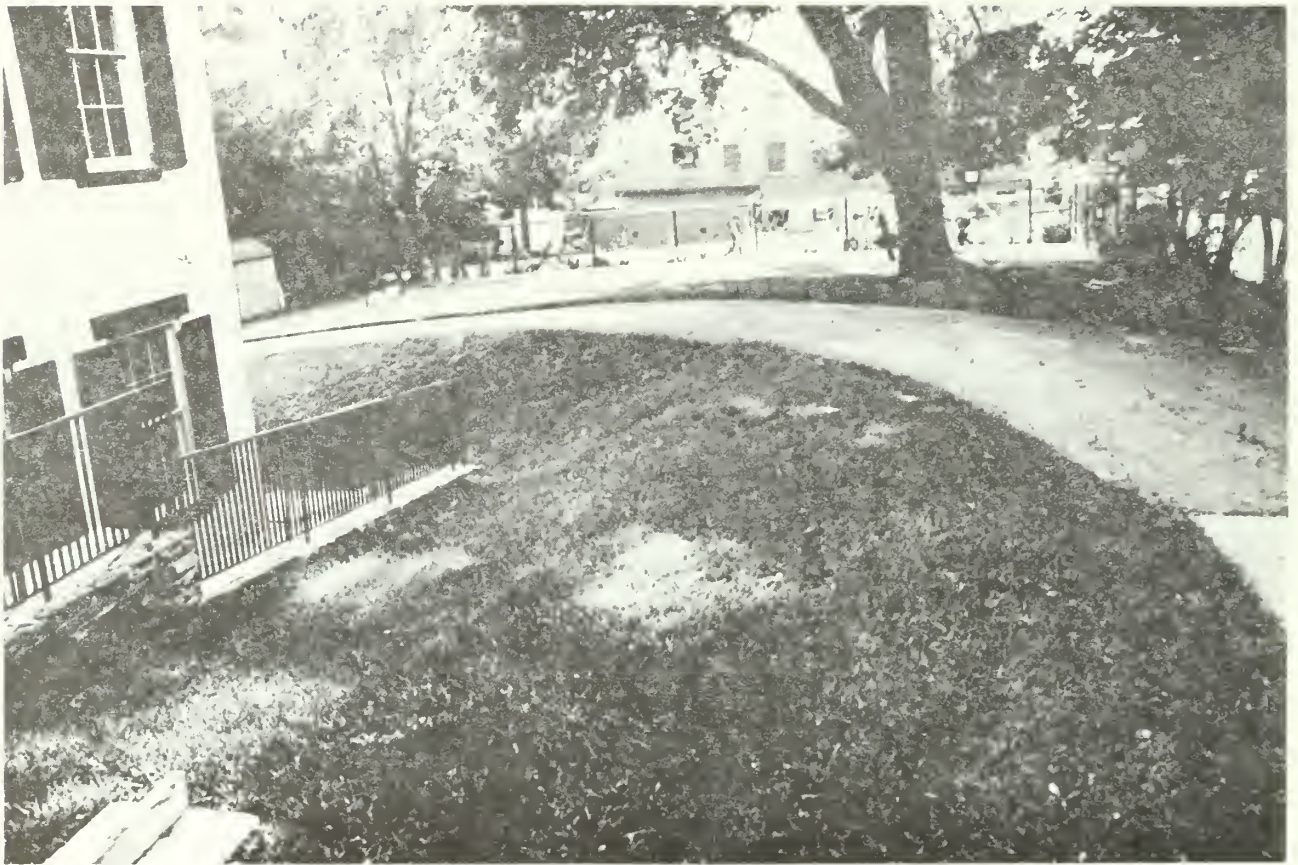


FIGURE 4.10

June 1987

Grounds of Taft Home (looking east toward back yard).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.11

June 1987

Grounds of Taft Home (looking west from back yard. Piazza is at the right).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.12

June 1987

Grounds of Taft Home (looking south from approximate location of historic well).

Mark A. Chavez, National Park Service, Midwest Regional Office

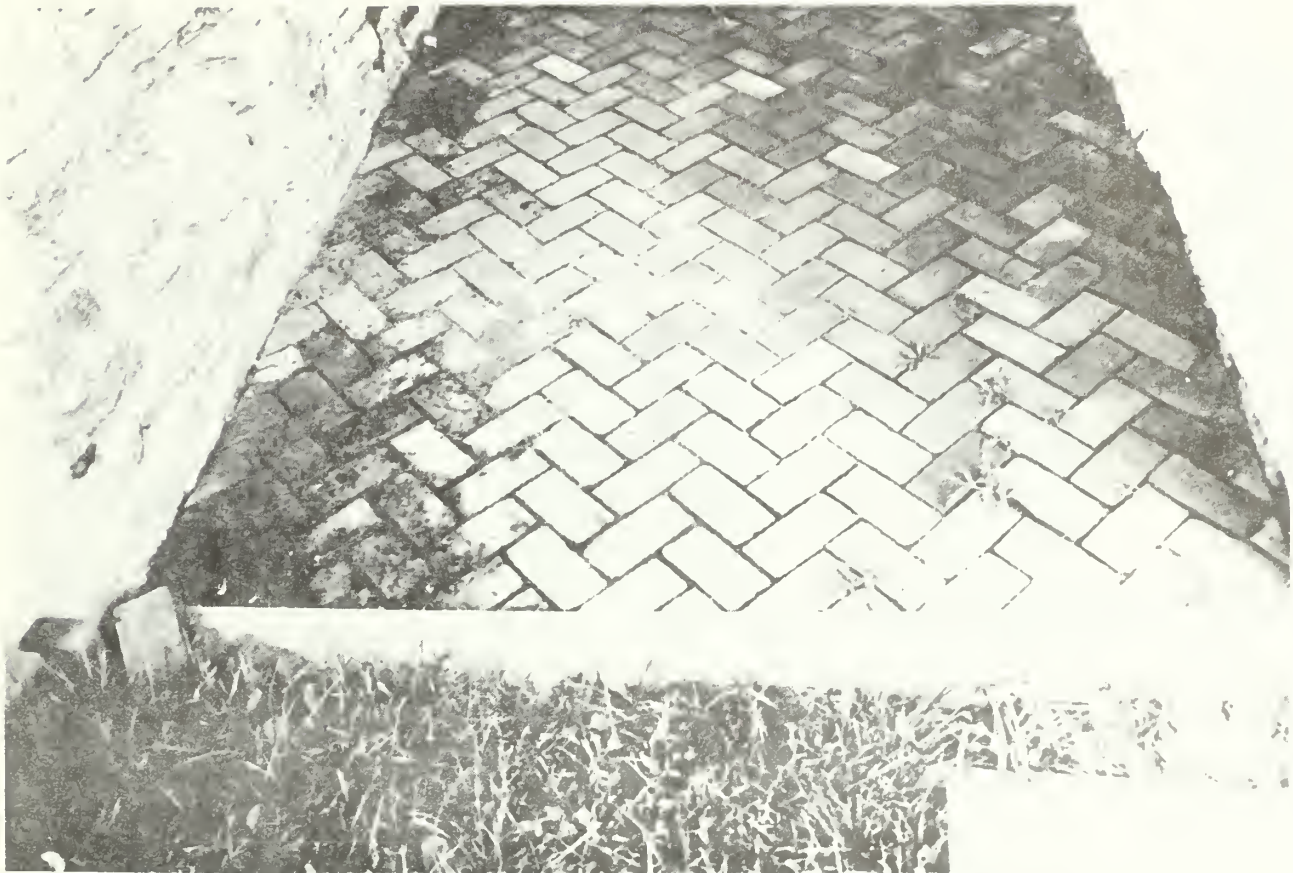


FIGURE 4.13

June 1987

Grounds of Taft Home (detail of the reconstructed "areaway" paving at southeast corner of house).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.14

June 1987

Grounds of Taft Home (looking east across the brick areaway).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.15

June 1987

Grounds of Taft Home (looking south from northeast corner of house).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.16

June 1987

Grounds of Taft Home (looking south at termination of contemporary concrete walk near carriage entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.17

June 1987

Grounds of Taft Home (looking northeast toward carriage entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.18

June 1987

Grounds of Taft Home (looking west toward concrete steps leading to main entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.19

June 1987

Grounds of Taft Home (looking east along existing concrete walk leading to carriage entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office

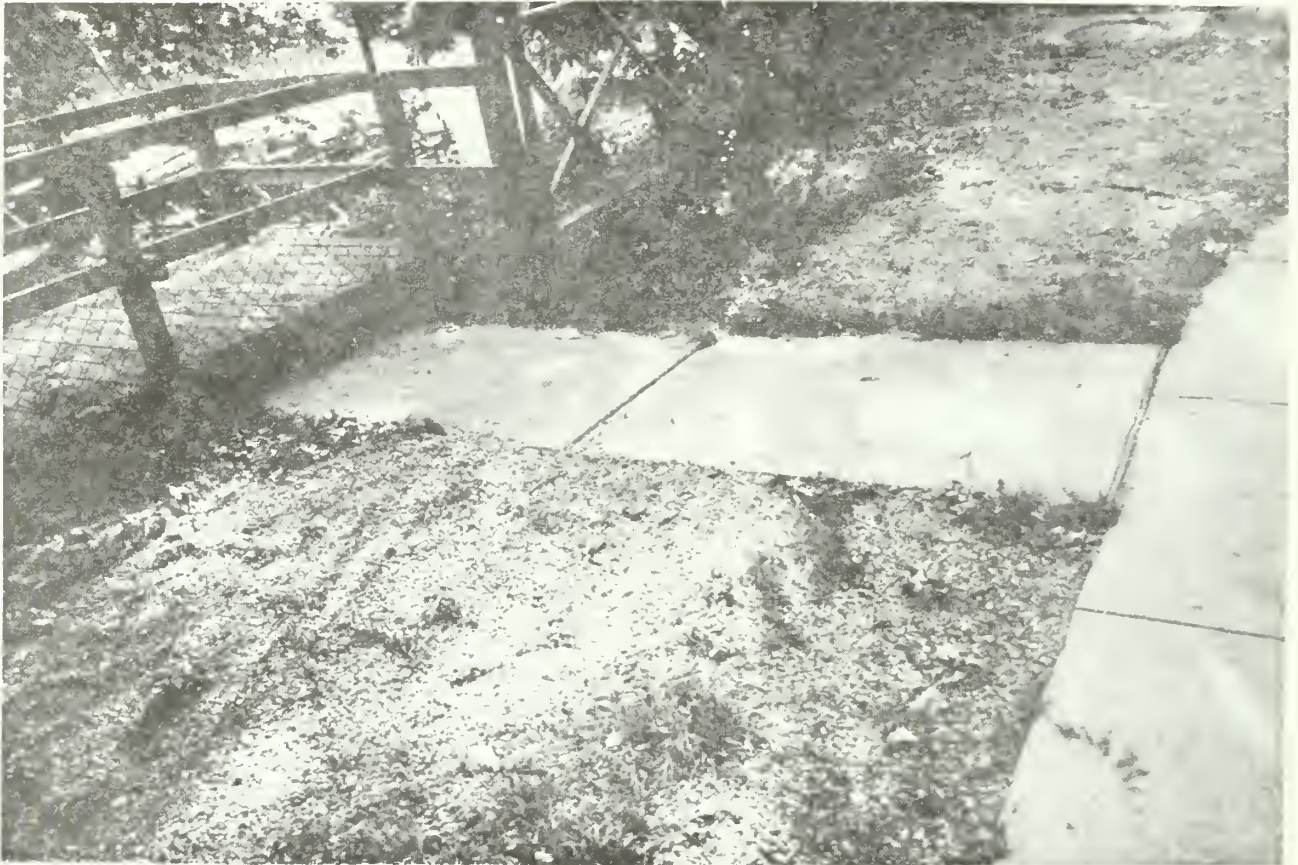


FIGURE 4.20

June 1987

Grounds of Taft Home (looking northeast toward existing wood landing near northwest corner of home).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.21

June 1987

Grounds of Taft Home (looking south from concrete steps toward main entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.22

June 1987

Grounds of Taft Home (looking north toward concrete steps along the concrete walk which leads to the main entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.23

June 1987

Grounds of Taft Home (looking south along concrete walk to main entrance).

Mark A. Chavez, National Park Service, Midwest Regional Office



FIGURE 4.24

June 1987

Grounds of Taft Home (looking north along concrete walk in front yard).

Mark A. Chavez, National Park Service, Midwest Regional Office

V. RECOMMENDATIONS AND DESIGN DEVELOPMENT

V. RECOMMENDATIONS AND DESIGN DEVELOPMENT

=====

RECOMMENDATIONS

Figure 5.1 is a modification of Figure 3.17 which shows the walks as numbered below. Using McCollough's "Plan of Grounds, Historic Period" (see Figure 3.17) as a basis for determining the existence or non-existence of brick walks, the following summary was developed following the analyses contained in Chapter 3, Figure 5.2 represents a graphic summary of the conclusive archeological findings.

Walk number 1 (Privy walk): McCollough's 1971 archeology did disclose the north edge of a four-foot section of the privy walk, approximately five- to six-feet below present grade and approximately thirty-six feet east of the eastern kitchen doorway (see reference 6 on page 16). Additional archeology will be required to determine the exact location.

Walk number 2 (From eastern kitchen door northward to northeast corner): Herringbone-patterned brick was uncovered at the northeast corner by Paul Kiel during foundation investigations in the 1960s (see reference 6 on page 16). There is no mention, however, as to the manner which the pavers were set (loose-laid in sand or set in concrete), although Bauxar's very definitive discovery in 1975 disclosed a diagonal herringbone pattern dry-laid in sand farther south along the east wall.

Other paving in this area was over-laid with concrete, as was this section, according to McCollough, so the assumption is that the corner brick is historic, and is a continuation of the walk which Bauxar discovered. McCollough discovered the "truncated remains of herringbone-patterned brick paving" at the southeast corner of the 1851 addition. It is his assumption that this area represented a continuation of the brick areaway south of the kitchen, which, if one studies the site plan, would have somehow incorporated the area around the well. It is also McCollough's assertion that the privy walk continued from this paved area eastward.

Walk number 3 (from northeast corner west to carriage entrance):

Historic brick paving located in this area is assumed to belong to a walk along the north joining either the northeast kitchen entrance or the carriage entrance or both. Non-historic pavers (McManigal) were overlaid with concrete walks in this area, and occurred above the historic pavers.

Walk number 4 (from carriage entrance westward to steps from north front walk):

In reference 25, pages 31-32, Perry describes a McManigal paved walk which apparently followed the existing concrete walk which curves north and westward from the carriage entrance. She asserts this walk (her "Feature J") was "capped" with cement in 1979. If consistency rules, the McManigal pavers were laid directly above historic pavers. The latter were either not discovered or not discussed. Later in her report (see reference 28, pages 34-35), Perry describes a brick walk of

McManigal pavers tracing "a route from the carriage entrance to the front door." This feature (her "Feature K") unfortunately is not clear in the graphic descriptions in her report--one cannot determine exactly where Perry discovered this walk "from the carriage entrance to the front door." Again, if construction episodes were consistent, the McManigal walk would have overlaid a historic walk.

Walk number 5 (north front walk, from steps near carriage drive to west entrance): There is no evidence, archeological or historical, to support the existence of this walk. As stated earlier, such a walk would have certainly made sense historically. Figures 5.3-5.7 (from Frank J. Scott's 1870 edition of Suburban Home Grounds) show typical layouts for residential properties in the mid- to late-1800s. Perry's discovery of the McManigal brick would support this contention, as would the following, from Superintendent Steve Kesselman's memorandum dated May 26, 1987:

Before Alphonso Taft added the rear wing in 1851, the kitchen was in the front part of the house (room 003), on the north side. It would have been entered through a door near the northeast corner of the east (back) wall. The most likely way of getting there would have been a path around the northwest corner, as now, and then around the northeast corner. A walk around the south side would not have worked because the ground sloped steeply downward from south to north and was probably terraced. (Later on, Louise Taft mentioned the fear that that terrace would collapse if it were trenched for a pipe.) Direct pedestrian traffic, even tradesmen, would not likely have been directed via the muck of the carriage drive. This probably would have continued to be the case after Taft built the wing in 1851. The south and east doors to the basement, which led into a vestibule, might have been used for kitchen access, but they also led into the formal areas of the house and would have required a high set of steps to

reach any path on the south side of the house, which was at first floor level. The south door, in any case, was possibly used to get to a storeroom and the east door to get to the well and privy. Pedestrians would not have been directed past those "conveniences."¹

The following quotations make reference to a terrace in the back yard:

. . . Mrs Burkhardt has applied for permission to dig a drain right across our lot about fifteen feet back of the house down the hill to tap our house sewer . . . (William Howard Taft to Alphonso Taft, October 9, 1882).

. . . I hope you were decided on the question of the Burkhardts digging up our ground. There is always danger of that terrace sliding down, and I would not have it disturbed on any account. . . . (Louise Torrey Taft to William Howard Taft, February, 1883).²

The following is McCollough's conclusion relating to this terrace:

Rear Terrace. Louise Taft's 1883 reference to a terrace, which she feared might "slide down" if a North-South trench were dug just behind the house . . . was probably a relatively small raised and nearly level area (natural or filled) on the southern half of the property just behind the house; this would have given way on the North to the lower-level carriage drive.³

Walk number 6 (main entrance--west--walk): Apparent from the historical photograph (see Figure 3.9). Diagonal herringbone-pattern paving can be made out in the photograph. The width matches the cheek

1. Steve Kesselman, memorandum from Superintendent, William Howard Taft National Historic Site, subject: Brick pathways at Taft house, 26 May 1987.

2. Major Charles Ross McCollough, William Howard Taft National Historic Site: Historic Grounds Report, National Park Service: 1 October 1971, p. 30.

3. Major Charles Ross McCollough, William Howard Taft National Historic Site: Historic Grounds Report, National Park Service: 1 October 1971. p. 42.

walls of the front gate steps--the historic width measuring approximately six feet, eight inches.

Walk number 7 (from main entrance walk toward the south and then continuing eastward to the piazza): The historic photograph shows the brick walk leading off from the main entrance walk. McCollough's archeology disclosed historic herringbone pattern paving under the south porch. Using reverse perspective projection, the width was determined to be between three feet, eight inches and four feet. Also using this projection, it was determined that the walk started curving toward the south approximately ten feet, three inches from the west wall of the house, which would place the beginning of this walk further west than what exists presently.

Walk number 8 (leading from piazza eastward toward the southeast corner of the home): Although a concrete walk (which overlaid brick of the McManigal variety) was in place in 1971, with a set of steps which led down the steep embankment at the southeast corner to the level of the east kitchen door, there is no evidence, archeological or historical to support this assumption. Also, as pointed out by Superintendent Kessleman, the grade in this area would have made pedestrian travel difficult and useless.

CONCLUSION: Walks 1 (privy), 2 (east), 3 (northeast), 6 (west--main), and 7 (south and southwest) can be supported archeologically or

historically as of this writing. Walk 4 (north, from carriage entrance), from Perry's descriptions, may represent the location of a historic walk and might be another candidate for reconstruction. Walk 5 (front north) may be reconstructed as a matter of convenience and logic; however, its exact location and construction would be a matter of conjecture. Additional archeology in these areas may prove more conclusive. Walk 8 (southeast) very likely never did exist; however, additional archeology may prove the contrary.

For the purposes of this report, Walks 2, 3, 6, and 7 will be reconstructed based on conclusive historical and archeological research. The privy walk (number 1) has also been supported, but regrading of the existing site will have to be accomplished prior to its reconstruction. Walks 4 and 5 will remain as concrete sidewalks until further archeology can be performed in these areas. Walk 8 will not be reconstructed at this time.

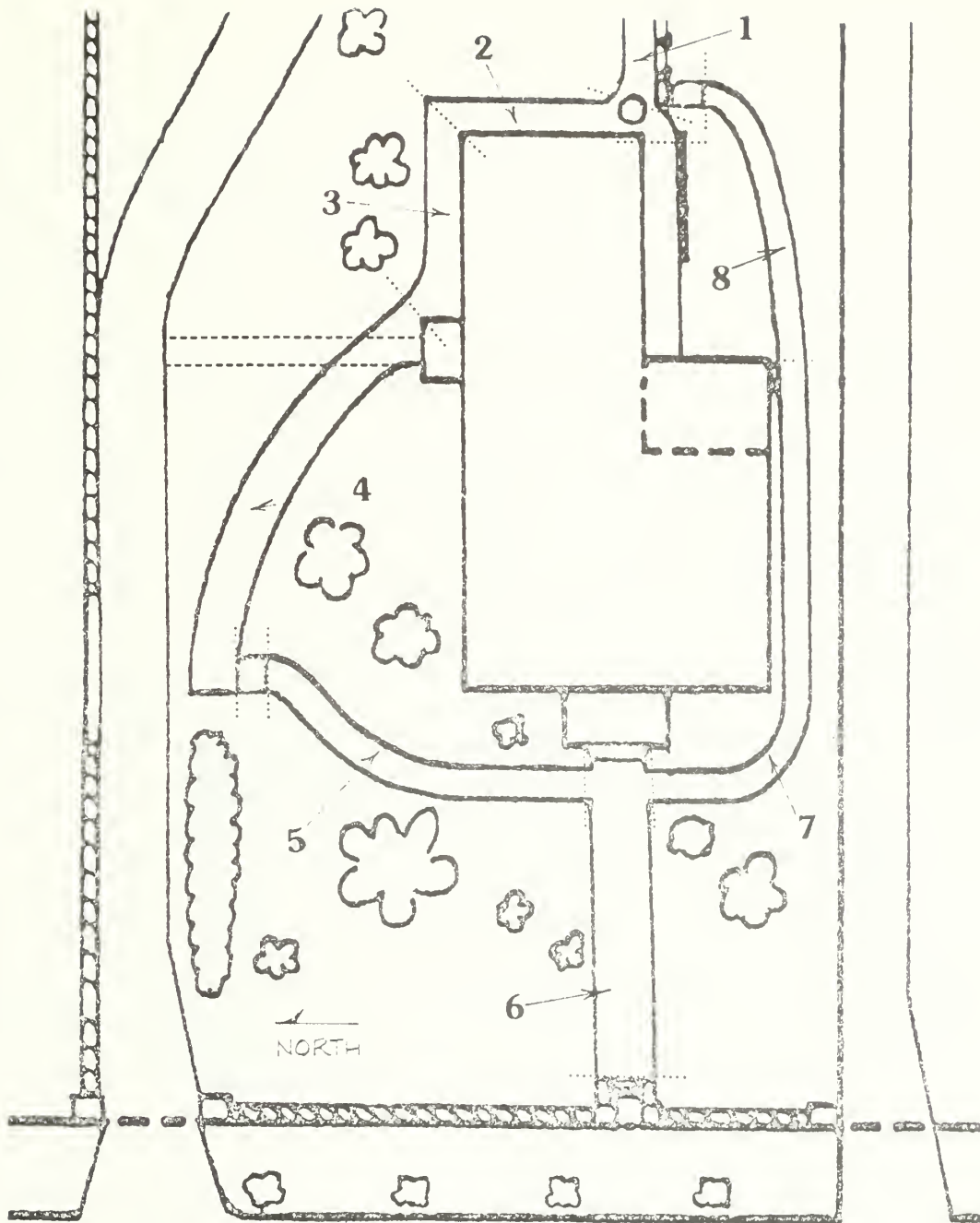


FIGURE 5.1

Detail of historic grounds plan.

Charles Ross McCollough, detail of Figure 1 from William Howard Taft National Historic Site: Historic Grounds Report, October 1, 1971, National Park Service, Midwest Regional Office.

This figure approximates the grounds as McCollough envisioned them historically. The numbers refer to specific walks referenced in the text.

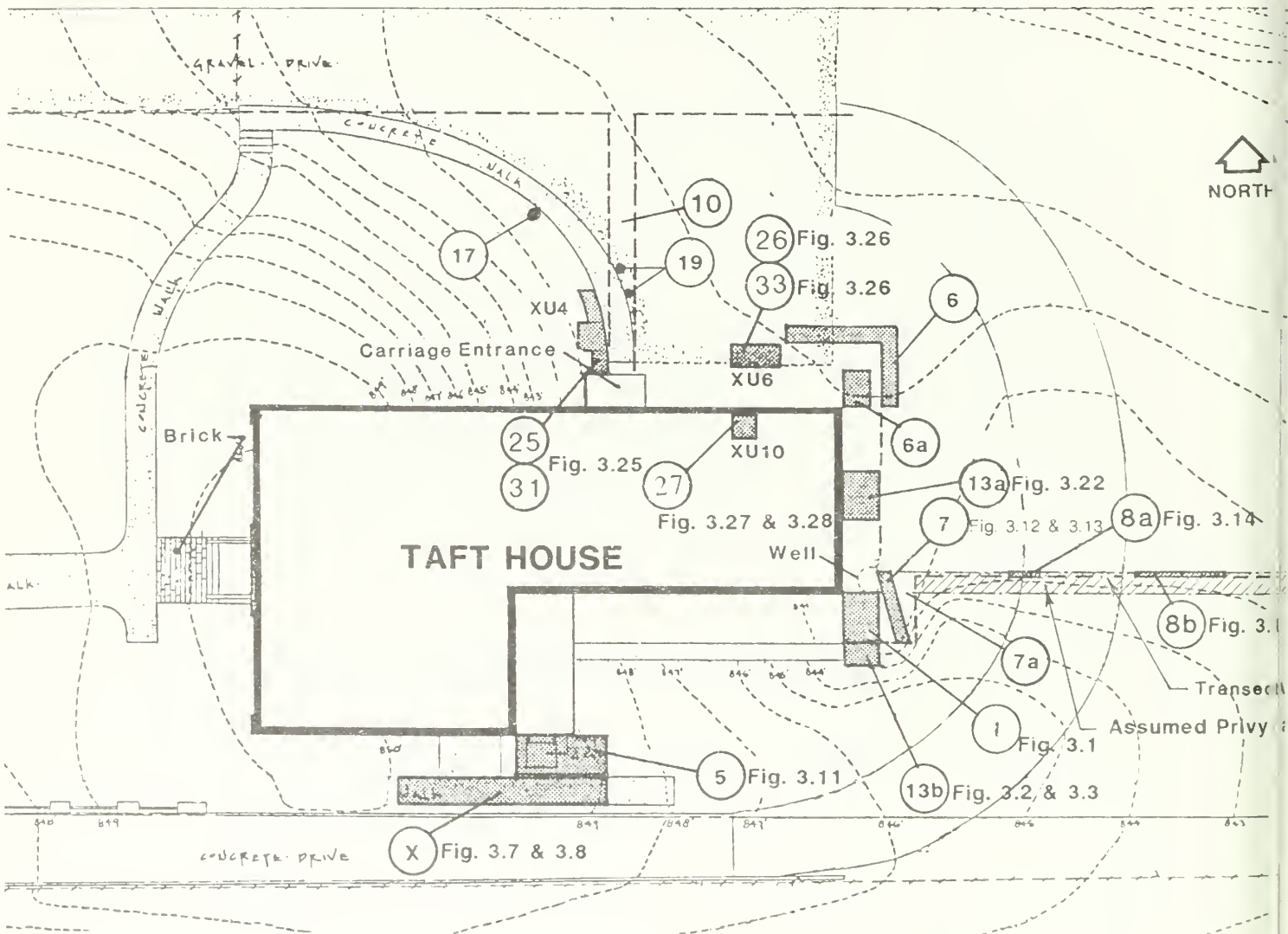


FIGURE 5.2

Summary of Archeological Findings

Conclusive findings of historic brick walkway remnants are graphically depicted here. The numbers denote listed references in chapter 3. A key to the numbers is found on pages 117-118.

KEY TO FIGURE 5.2:

(Numbers below, as found on the drawing, refer to specific references in Chapter 3 of this report):

1. McCollough described the brick areaway extension to the east near the historic well.

5. When the south porch was removed in the 1970s, McCollough observed herringbone-patterned brick paving, most likely remnants of a historic brick walk in this area.

6. McCollough, in his attempt to locate the privy walk, excavated two trenches at the northeast corner of the house. Results were negative.

6a. McCollough describes ground investigations performed by architect Paul Keil for examination of the foundation. These investigations revealed historic brick paving.

7. McCollough discovered a section of historic paving beneath a concrete walk at the southeast corner of the house. This he believed to be a part of the brick "area way" which might have encompassed the well.

7a. McCollough mentions in this reference that the brick found here once formed a portion of a "larger paved area" at the southeast corner of the home. It is possible, studying the sketch, that the privy walkway was also incorporated into this larger paved area.

8a and 8b. McCollough discovered two segments of the north edge of the privy walk in his 'Transect A.'

X. (No reference in text.) When the concrete sidewalk just south of the south porch was lifted, two layers of brick were found. Neither, however, were historic, according to Perry's analysis.

10. William Miller asserted that a walkway from the carriage entrance would have led directly north intersecting with the carriage drive rather than curving westward as McCollough's drawings showed, and similar to what exists today.

13a. Deborah Bauxar describes historic paving found under, first a layer of concrete sidewalk, and second, beneath a layer of non-historic pavers.

13b. Bauxar's initial observations revealed a brick sidewalk at the base of a set of limestone stairs. The walk and stairs were found to be post-Taft.

17. In Perry's field notes, she describes finding "large soft orange brick at an angle" (in shovel probe "B"). However, she does not elaborate on this finding.

19. Again, in her field notes, Perry describes finding "historic" paving in shovel probes "G" and "H." As with the above reference, however, an elaboration was not provided.

25 and 31. Leslie Perry's investigations in the north yard (her excavation unit [XU] 4) revealed brick paving of the McManigal variety. Her analysis showed this brick to be non-historic.

26 and 33. Perry's investigations of XU 6 revealed two layers of brick paving under the concrete sidewalk: first a non-historic layer of the McManigal variety, and beneath that, historic paving.

27. Historic paving was discovered in the basement by Perry. It was assumed that this paving belonged to the "back piazza."

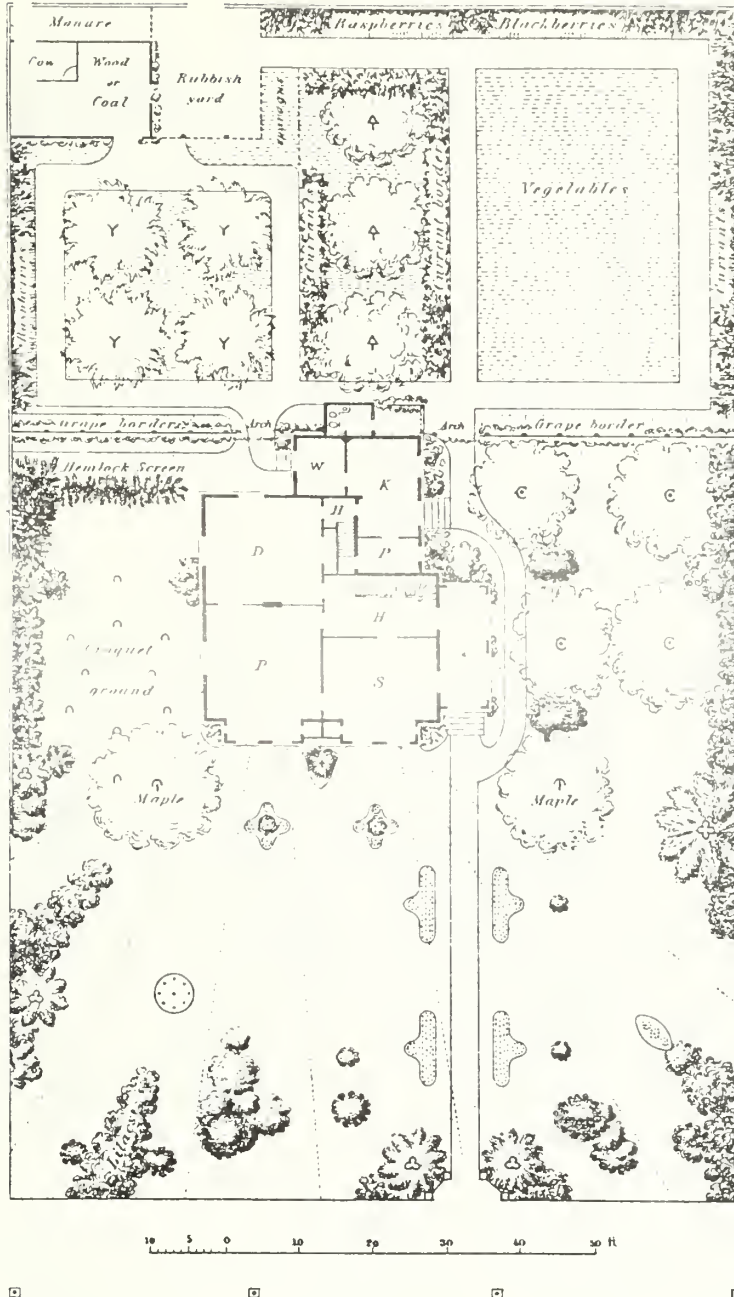


FIGURE 5.3

1870

Typical grounds plan.

Frank J. Scott, Plate XII from The Art of Beautifying Suburban Home Grounds, 1870. D. Appleton and Company. New York, New York.

This figure and the succeeding four figures indicate possible arrangements of walks around homes of the nineteenth century. Note the walk which leads from the main entrance around to the kitchen in each case, possibly supporting a similar case for the Taft home. (Unsupported historically or archeologically).

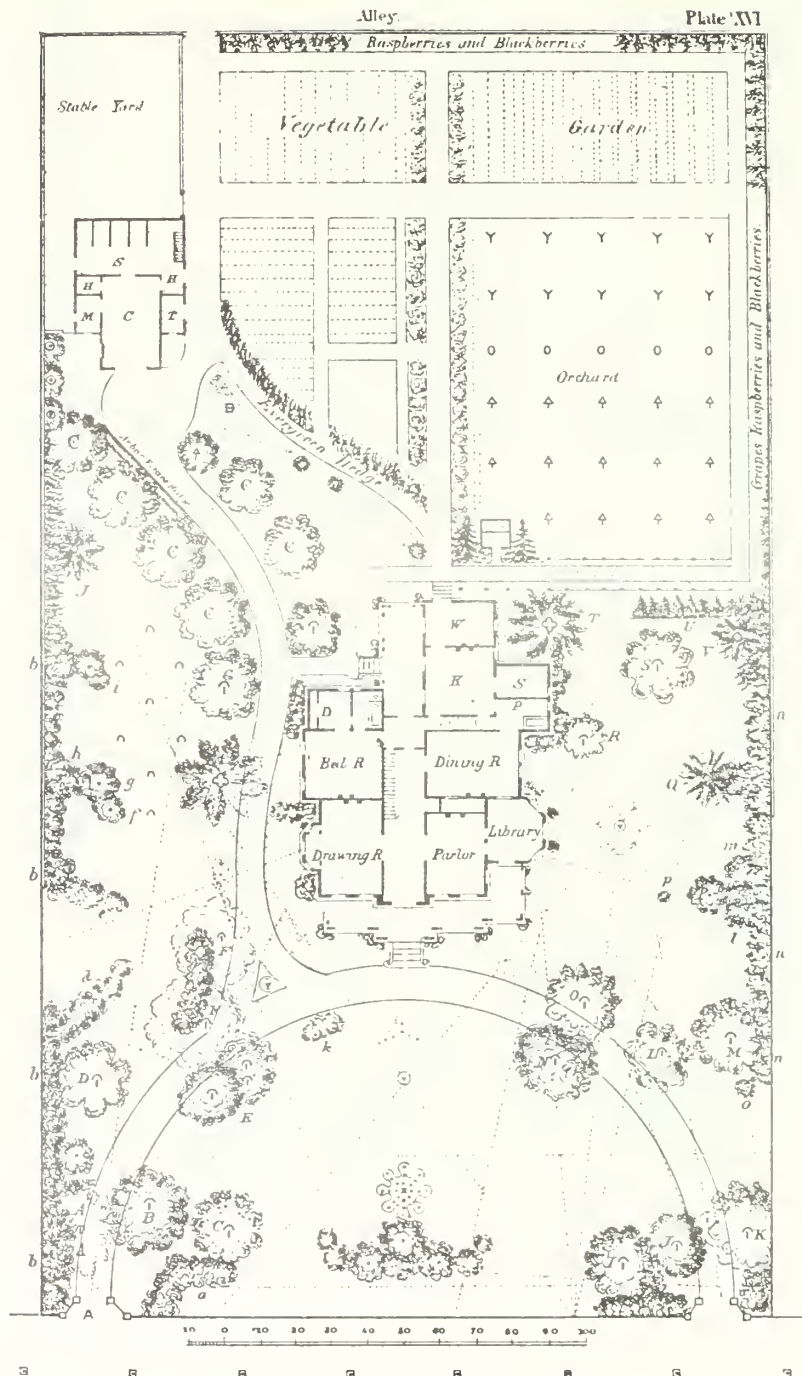


FIGURE 5.4

1870

Typical grounds plan.

Frank J. Scott, Plate XVI from his The Art of Beautifying Suburban Home Grounds, 1870. D. Appleton and Company. New York, New York.

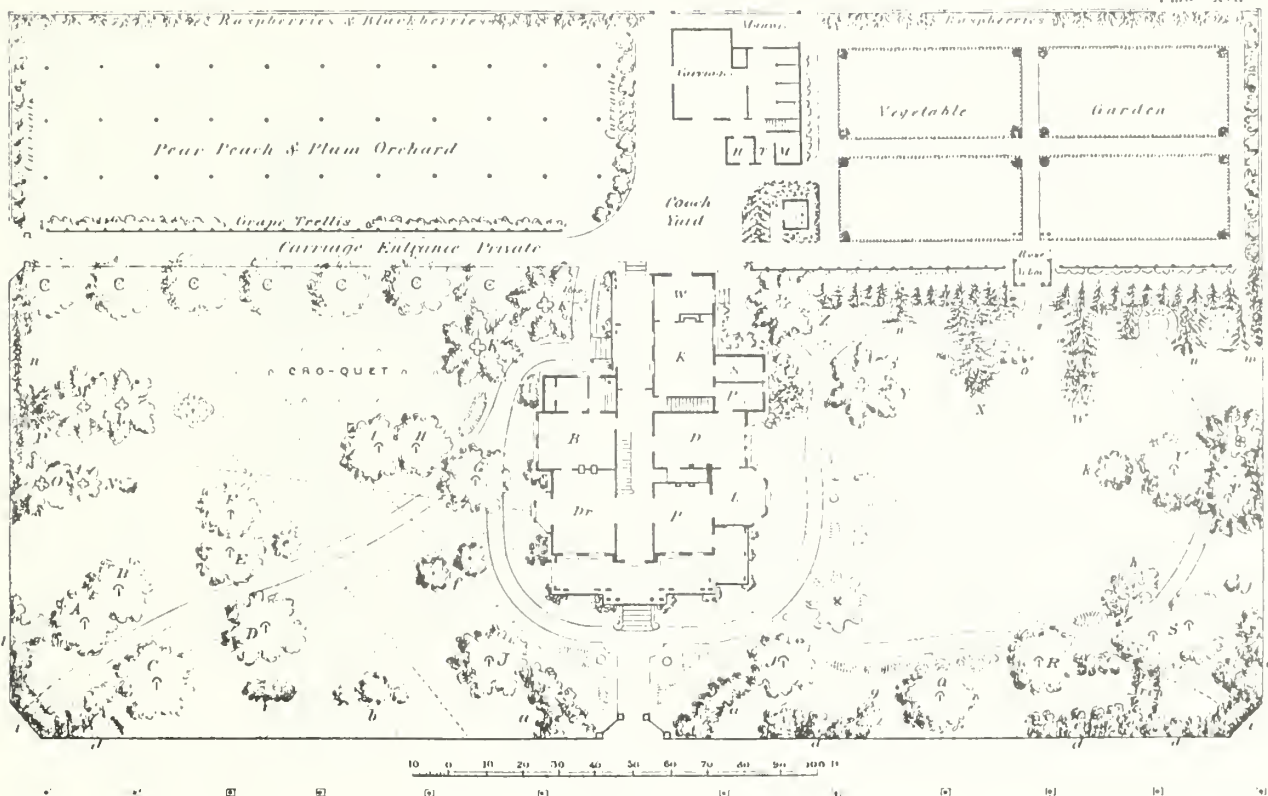


FIGURE 5.5

1870

Typical grounds plan.

Frank J. Scott, Plate XVII from his The Art of Beautifying Suburban Home Grounds, 1870. D. Appleton and Company. New York, New York.

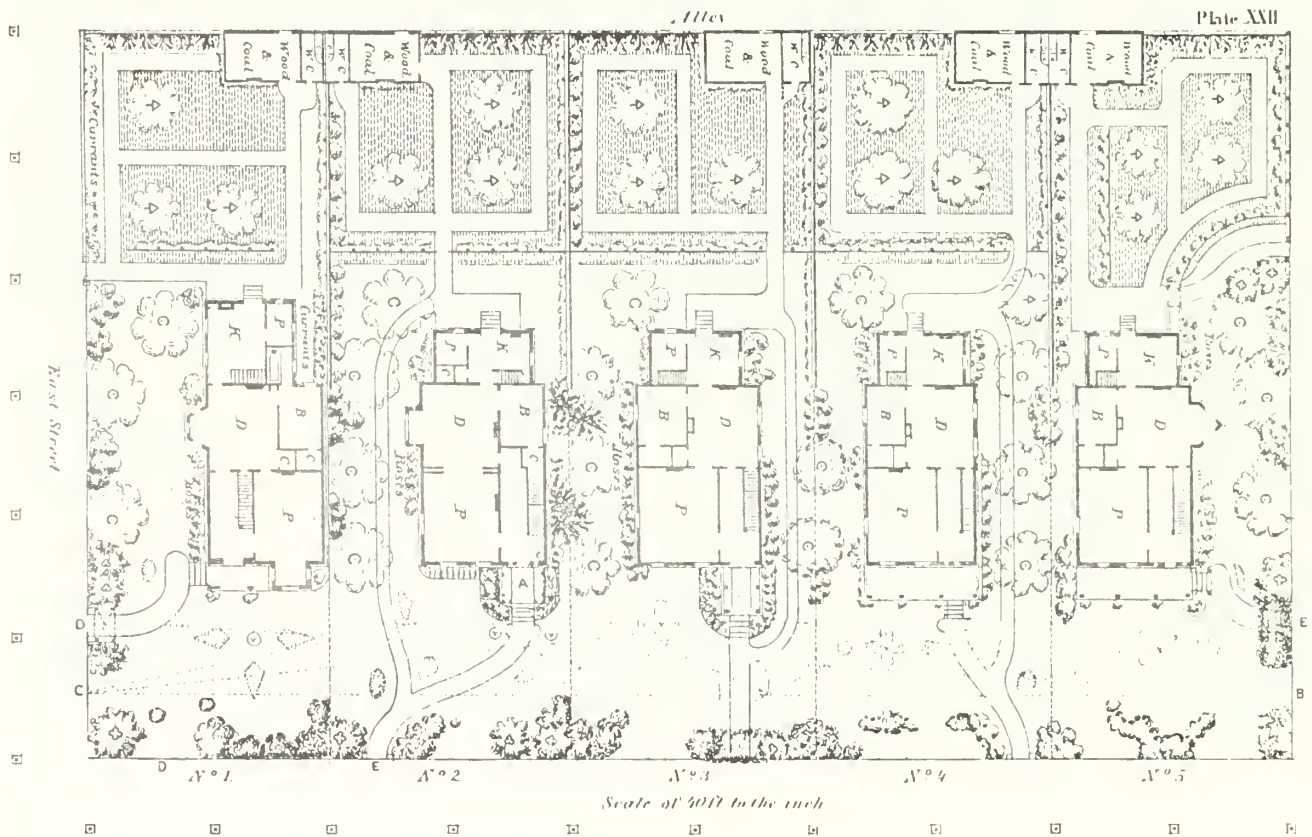


FIGURE 5.6

1870

Typical grounds plan.

Frank J. Scott, Plate XXII from his The Art of Beautifying Suburban Home Grounds, 1870. D. Appleton and Company. New York, New York.

Plate XXIV

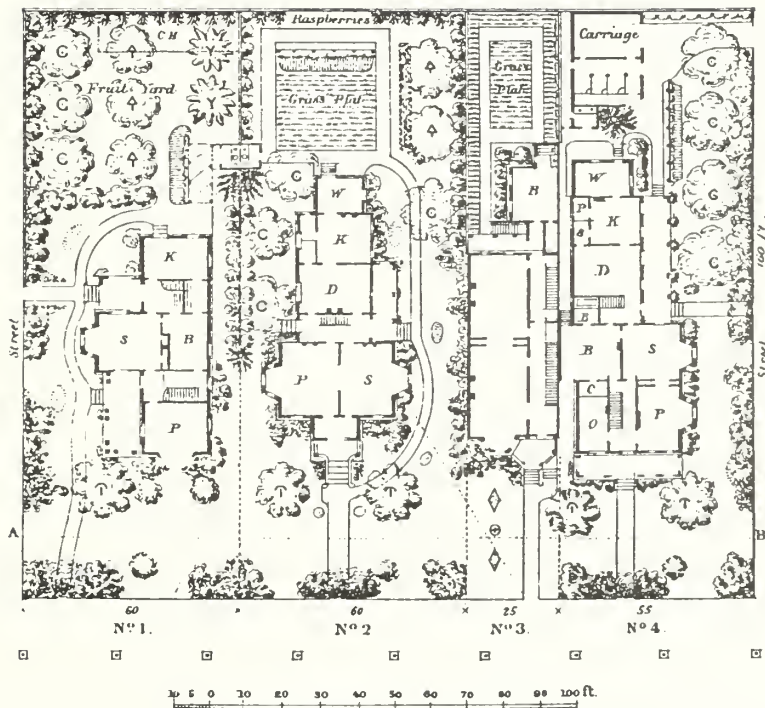


FIGURE 5.7

1870

Typical grounds plan.

Frank J. Scott, Plate XXIV from his The Art of Beautifying Suburban Home Grounds, 1870. D. Appleton and Company. New York, New York.

DESIGN DEVELOPMENT

Following the conclusions arrived at above, reconstruction design for the front, south, northeast, and east brick walkways was accomplished utilizing the following guidelines. Figures 5.8-5.11 represent the design which was accomplished.

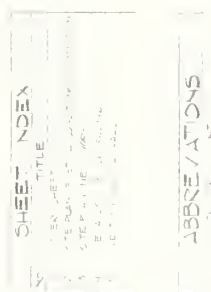
1. All walks were designed with a herringbone pattern, forty-five degrees to the major direction of travel.
2. All walks with the exception of the front (west) entrance walk will be four-feet in width. The reverse perspective projection showed the walks to be between three feet, eight inches and four feet in width. Brick coursing facilitates the four-foot width. The width of the front walk (six feet, eight inches) was taken directly from the existing width, which corresponds to the historic width.
3. Based on similar historical studies, i.e., Lincoln Home site research, the edge treatment used was brick laid on edge in a "running header" course.
4. All walks will be set on a bed of sand to provide a flexible base.
5. The south walk will be placed two feet from the exterior south wall to line up with the wood steps to the piazza.

6. The east and north-east walks will be placed up against the home. Conclusive evidence (see Figures 3.21 and 3.22) indicates the east walk was placed against the home. Archeological investigation has determined the same for the north-east walk.

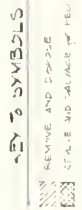
7. The transition between the north-east walk and the carriage entrance was formed with a gentle curve based on historical reconstruction of the carriage entrance, even though McCollough had delineated the walk as beginning at the east side of the carriage entrance and continuing due east from that point (see Figure 3.17). Logic, and the lack of conclusive archeological evidence, dictated the variance from McCollough's assumption.

8. The well at the southeast corner of the home will be surrounded by a four-foot brick area. The privy walk which McCollough disclosed lines up with this portion of brick paving. Although the exact quantity of brick paving in this area is unknown, based on Perry's archeology, and historic photographs, it is known there was a larger paved area in the vicinity of the well. The "areaway" most likely extended east, surrounding the well, and a walk proceeded east toward the privy following the north edge of this larger paved area.

REPOINT WEST RETAINING WALL AND RECONSTRUCT BRICK WALKS



REVISOR	DATE	BY	NO.
PREPARED	DATE	BY	NO.
RECOMMENDED (RECEIVED BY) NAME, POSITION, DATE	RECEIVED BY	POSITION	DATE
APPROVED (RECEIVED BY) NAME, POSITION, DATE	RECEIVED BY	POSITION	DATE
<p>UNITED STATES DEPARTMENT OF THE ARMY NATIONAL PARK SERVICE PLANNING AND RESOURCE PRESERVATION WESTERN REGIONAL OFFICE</p> <p>REPORT WEST RETAINING WALL 8 RECONSTRUCT BRICK WALKS</p> <p>WILLIAM HOWARD TART, NPS</p>			
SHEET		1	5
OF		5	5



SITE PLAN : EXISTING CONDITIONS / DEMOLITION

VI. BIBLIOGRAPHY

VI. BIBLIOGRAPHY

=====

NATIONAL PARK SERVICE MIDWEST REGIONAL OFFICE OMAHA, NEBRASKA

- Arbogast, David. National Register of Historic Places--Nomination Form, William Howard Taft National Historic Site: 1976. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- Bearss, Edwin C. Historic Structure Report, Historical Data - Home. National Park Service, Denver Service Center: October 1972. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- Chavez, Mark. Photographs of William Howard Taft National Historic Site, Cincinnati, Ohio. June 1987. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- Crosby, Anthony. Historic Structure Report, Architectural Data Section. National Park Service, Denver Service Center: June 1985. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- Kesselman, Steve. Memorandum from Superintendent, William Howard Taft National Historic Site. "Brick pathways at Taft house." [D30(WIHO)] May 26, 1987. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- McCollough, Major Charles Ross. William Howard Taft National Historic Site: Historic Grounds Report. National Park Service: 1 October 1971. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- Miller, William J. William Howard Taft National Historic Site, Historic Structure Report. National Park Service: 1974. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.
- Perry, Leslie A. 1982 Archeological Investigations at the Taft House Site, (33HA431). Midwest Archeological Center. Lincoln, Nebraska. June 1983. Midwest Regional Office files. Office of Planning and Resource Preservation. Division of Cultural Resources Management.

NATIONAL PARK SERVICE
MIDWEST ARCHEOLOGICAL CENTER
LINCOLN, NEBRASKA

Perry, Leslie A. Unpublished field notes from archeological investigations during April 26 - May 5, 1982. Originals on file.

NATIONAL PARK SERVICE
DENVER SERVICE CENTER
LAKEWOOD, COLORADO

Bauxar, Deborah K., William Howard Taft National Historic Site, Archeological Investigation of Foundation and Cistern. December 1975. Technical Information Center.

NATIONAL PARK SERVICE
WILLIAM HOWARD TAFT NATIONAL HISTORIC SITE
CINCINNATI, OHIO

McCollough, Major Charles Ross. William Howard Taft National Historic Site: Archeological Investigation of Grounds. National Park Service: 1 June 1972. Park library. Office of the Superintendent, Cincinnati, Ohio.

William Howard Taft National Historic Site Photographic Files. Office of the Superintendent, Cincinnati, Ohio.

Clemson University



3 1604 010 152 579

